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# EXCAVATIONS AT SAQQARA

(1911-12)

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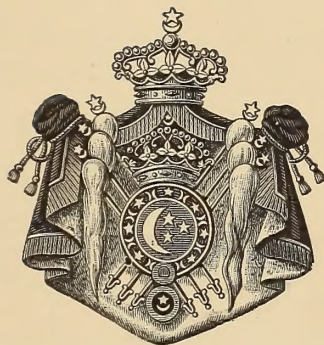
EXCAVATIONS AT SAQQARA

*EV. 53*  
(1911-12)

THE TOMB OF HESY

BY

*James Edward*  
J. E. QUIBELL



LE CAIRE

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D'ARCHÉOLOGIE ORIENTALE

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# EXCAVATIONS AT SAQQARA.

1911-12.

## THE TOMB OF HESY.

During the two seasons of 1910-11 and 1911-12 the greater part of our time was devoted to that part of the cemetery which lies on the high ground overhanging the village of Abusir. Here an area perhaps 600 metres long and 250 wide is covered by crude brick mastabas of the II<sup>nd</sup> and III<sup>rd</sup> Dynasties, all much denuded, but singularly free from burials of a later date. Two patches of ground in this area have been fully cleared and some 500 mastabas of varying sizes, some very large but most quite small, dug out. All but a mere half dozen and those of the poorest, had been robbed in a remote antiquity, almost certainly during the Old Kingdom: no paintings and hardly any inscriptions on stone were found. The interest of the tombs lies in a mass of detail, in the plans, the pottery, the stone bowls and such matters. Of them a separate report is being prepared.

But one tomb, found in the first week of the second season, has an interest very different in degree and in kind. It had been much less denuded than the others and one wall was covered with paintings of a character new to Egyptian archaeology. These will interest many scholars to whom the details of tomb construction would be only tedious, and seemed to us worthy of a volume to themselves. With this view the Director General agreed, and in consequence the publication of this one tomb precedes that of all the others found near it. The tomb is that of Hesy, found long ago by Mariette, and famous for the five wooden panels which he brought from it to Boulaq. Drawings of three of these appear in the "Mastabas" and photographs in the "Album de Boulaq" and in several other works; the fourth and fifth remained unpublished till Weill gave them in his thesis on the II<sup>nd</sup> and III<sup>rd</sup> Dynasties.

It has been often stated that Mariette gave no information as to the position in which the panels stood. This is not quite the case, for in the "Album" it is clearly said that: "Le tombeau de Hosi est construit en briques jaunâtres et la chambre principale est un long couloir percé de nombreuses niches rectangulaires. C'est au fond de trois de ces niches que nous avons retiré les précieux panneaux . . .". This is quite correct except that the bricks are black, not yellowish. The position of the tomb, however, is not given in any publication, and by some oversight it was not pointed out to De Morgan when he made his map of the site. But all this while it was well remembered by one of Mariette's workmen, Osman Duqmaq, who is still with us and whose acquaintance with the cemetery began "in the reign of Said Pasha, two years before Ismail" i. e. in 1861. He was then a basket boy in the excavations, and, except for five years in Mariette's service in Cairo and the south, has been in Saqqara ever since and either in Government service or in temporary



suspension therefrom has always made his living from the antiquities. He has a strong, though not a faultless memory and can recall most of the digging that has taken place here during the last fifty years. When we began to work in the neighbourhood he told me about the wooden stela, described the niches in which they were found and pointed out a certain dark mound near us as the site of the tomb. This is marked in De Morgan's map (*Carte de la Nécropole Memphite*, 1897), but bears no title. It will be seen on plate X, the solitary red T-shaped mark 1 centimetre above the word *علوايه زيد* in *زيد*.

It is the highest point in the neighbourhood and had for this reason been selected by M. Craig of the Survey Department as one of the points for a small survey of triangles of high precision on which the surveys of my work, year by year, were intended to hang. (This point is a cast-iron cylinder embedded in cement and is visible in the view of pl. II.) The mound was soon seen to be a solid mass of brick and to have no filling of chip or gravel, as is more usual. After determining the main lines of the plan we began to clear the long passage from which the panels had come.

It was very narrow, just over a metre wide (1 m. 06 cent.); on one side were complex niches of the type well known from several early tombs, and consisting of two elements, deep recesses alternating with piers, both of them in their turn adorned by small rectangular niches; at the back of the recesses one could see where the panels had stood. The niches were plastered and the plaster painted with geometrical patterns in black, red, yellow and green, evidently the usual patterns of the decorated niche; the colour was rather dull, fragile and threatening to fall, but enough remained for us to recognise the design on each panel, and the detail of the cording by which the mats were stretched taut was more carefully and less conventionally executed than in any examples known hitherto. The other side of the passage was formed by a plain wall of crude brick covered with plaster most admirably laid. And this surface was covered with paintings of a kind to which we can shew no parallel. There were no scenes of bearers of offerings, no figures of butchers with little explanatory texts above them, no human figures, nor animals, indeed, at all, but long rows of oblong frames on a background of matting, looking much like pictures in a gallery.

This was something quite new : they had not been mentioned and had apparently not been seen before. Mariette may have known of them and his notes remained unseen and unpublished, but it is also possible that he never saw them : during his later years he was ill and often dependent on the report of his native reises, who might well think the paintings of little interest if indeed they saw them, for in the glare of sunlight and when covered with dust they might very easily escape notice. The colours were nowhere bright; much had fallen and the little pittings of the surface where bits of straw from the plaster had decayed away, catch the eye far more readily than do the designs they disfigure.

After clearing the passage completely, we covered it with a temporary roof of boards, mats, and earth, and at night time closed up most openings with mats : this was necessary, for the surface of the plaster disintegrated very rapidly under change of temperature and humidity; in the silence, as we stood for hours drawing, we could often hear the particles of painted plaster falling down.



The designs were drawn by me to a scale of one fifth, many of them again to natural size, and the best preserved parts were copied by my wife in colour. This could not all be finished before the winter, so on December 26<sup>th</sup> we began to fill the corridor in again with sand and brick dust and so left it till March when the danger from continual damp air was past. It was then cleared for the second time and left open till the drawings were finished, afterwards it was sanded up again and so remains. It is regrettable that the tomb cannot be left accessible to the public, but of this there can be no question; the passage is so narrow that people passing one another in it would brush off all the paintings up to shoulder level; it might indeed have been roofed over and the door blocked with just so much sand as could be removed at no great expense should any scholar express a wish to check or complete our copies. This would be most desirable, but was felt to be too dangerous unless guards were to be placed on the tomb night and day. It is true that there is nothing easily saleable in the tomb, but it must never be forgotten that we have to fear not only the robbers who steal for profit, but also the private enemies of our guards who may damage a tomb merely to spite those responsible for its preservation. Such an accident has occurred before now and not once only. The corridor therefore remains closed.

While the paintings were covered up during the winter the shaft and the underground chambers were cleared out. This was a lengthy process for the tomb was deep; five ladders one above another were needed to reach the lowest of the rooms. The portcullis was found opposite the door of the chambers, pulled out of place and broken, a large flat block with rounded edges, 1 m. 20 cent. wide, 1 m. 60 long (once longer) and about 0 m. 30 cent. thick.

The place had been robbed more than once; great numbers of broken vases of alabaster and other stones were found but few potsherds, no complete pots and very few small objects of any kind, the only important one being a bone daggerhandle inscribed with Hesy's name. In almost the last basketful of earth from the burial chamber, however, there appeared two pieces of a small clay seal which retained just enough of its imprint for us to read with certainty the name of the king Neterkhet of the III<sup>rd</sup> Dynasty.

This confirms and renders more precise the dating already given to the tomb by some authorities from consideration of the style of the panels.

The mastaba must have been of considerable size; it was 43 metres long and at one point still stands more than 5 metres high. It consists almost entirely of solid brickwork, with which even the greater part of the stairway had been filled. Hidden in the mass of the brickwork was a second corridor of niches, exposed at two points in holes made by ancient robbers.

This corridor had not been left as a hollow tunnel but filled in solid with brick. Two explanations of this are possible: the plan of the tomb may have been altered during the construction, or, as seems to me more likely, the hidden niches had some magical virtue which was to be exerted if the painted niches were destroyed. The same idea would explain the existence of a skin of brickwork about 0 m. 80 cent. thick, which was added to the outside of the building after it had been apparently finished and covered with a coat of plaster.

On the east face outside, the two niches, universal in these mastabas, are duly present. The northern one is of the ordinary form: the southern must be represented by the doorway giving access to the painted corridor; it is flanked on either side by three small niches over which



doubtless there was at one time some further decoration. There must have been a wooden lintel over the door and a limestone hawk, found in the filling close by, probably came from over one of the niches. It is of the familiar archaic type, 0 m. 25 cent. high, and had been long exposed to the weather before it got buried. A very stout wall built parallel to the east wall of the tomb forms with it a second narrow corridor: this was decorated with a frieze on one side, perhaps on both, but was not meant to be accessible to visitors, for both of the doors originally made had been carefully blocked. Of the frieze on the west wall little remained; cattle, human figures, a crocodile waiting at a ford, could be distinguished; this last was worth removal and is now in the Museum. On the left (south) of the chamber, before the entrance to the main corridor, is a room which may have been the serdab: a block of stone which appears to have served as a base to the statues is still in the floor.

Built on to the east wall of this chamber and to the wall of the outer corridor already mentioned were two smaller mastabas, doubtless of Hesy's relatives.

The underground part of the tomb consisted of a stair descending from the north and ending in an irregular shaft. The underground chambers were at three levels; the two lower ones consisted of one chamber each but in the upper one the plan was somewhat complicated. The shaft opened into an entrance chamber to the south; on the right side (W.) of this were the magazines, in the S. wall was a doorway blocked with masonry, on the east side another doorway, giving access to a passage running north and south; from this passage there opened to the N. E. and to the E. long magazines, once blocked by brick walls and hidden from view by the coating of plaster which covered brick and stone alike. At the S. end of this passage an opening to the west was made, by which one now enters the actual burial chamber; it is just south of the entrance chamber and in it the doorway blocked with masonry is seen from the other side. It was in this chamber that the seal of Neterkhet and also parts of two human skulls and some other bones were found.

Such were the main features of the tomb and any one who has read thus far and has also looked over the plates and read their description will have seen nearly all of importance that we observed, but various points remain to be mentioned: to set these out in order we shall have to go over again the different divisions of the tomb and some repetition will be unavoidable.

The plan of the niches is shown on plate VIII. Of the projecting piers there are twelve, of the deep recesses eleven. Of these the five southern were empty; the panels they once contained are at the Museum. The sixth panel was still in place but hopelessly decayed, with only a sign or two visible, the next four were in much the same state, and only the last one to the north was sufficiently well preserved to be worth removing. It is shown in plate VII. From the prints left on the mud surface it appears that the thickness of the panels varied from 9 to 20 centimetres. They must have been sunk back in the wall, as appeared from some bricks still in place which projected beyond what had been the panels' surface. These bricks must have needed to support them a lintel of wood or stone, and when search was made, part of the mould of such a wooden lintel was found, 1 m. 50 cent. long, 0 m. 20 cent. broad and 0 m. 06 cent. thick: it was fixed at 1 m. 15 cent. above the stone floor of the niche, i. e. just above the panel, the print of



which still remains in the mud mortar. From the back of the panel to the edge of the board is about 0 m. 20 cent., so this, or a little less, must be the thickness of one panel at the Museum. This was found in the recess nearest the south end. In another recess (fourth from the north end), a fragment of another of these boards was still in place.

In the upper part of the wooden panels, above the inscriptions (pl. XXIX, 2), will be noted an oblong hole which held, no doubt, a tie fixed into the brickwork. The print of such ties in the walls was looked for, but in vain. On each side of the niches, high up (above 2 metres) there were, however other wooden ties or pegs fixed diagonally in the wall; it would appear from this that there was something of wood in the upper part of the recessed niche, perhaps a long horizontal beam or panel, but of these panels, if they existed, no fragment remained. The floor of the recesses was paved with stone but in the corridor itself no floor was seen. The brickwork of the niches was beautifully made from very small bricks (0 m. 14 cent. by 0 m. 07 cent. by 0 m. 07 cent.); behind them much larger bricks (0 m. 21 cent. by 0 m. 13 cent.) were employed for the bulk of the structure. The wall is covered with a layer of mud plaster 0 m. 02 cent. thick, finished with a very true and flat surface, the ridges (arrises) being singularly sharp and straight. The mud contains a good deal of chopped straw but is not roughened to give keying for the plaster; this is contrary to modern practice and does allow the plaster to become now very easily detached and to fall away in large sheets. It must be granted that it has held up for a long time.

The white plaster is about 0 m. 005 mill. thick and also contains much straw. Its surface is generally flat, but the arrises having been exposed to the air, are everywhere rounded. The patterns are generally rather faint, most of the colour having fallen; the green flakes away with special readiness. The coloured plates VIII and IX are, obviously, not facsimiles, but are painted in pretty uniformly from the best patches preserved.

The east wall is plain, built of brick and covered with layers of mud and of white plaster. At the south end these have entirely fallen away and the brick is laid bare; at one place there is a large crack down the middle, but most of the surface in the lower half is preserved and so by standing at the south end one can sight along a plastered surface of nearly 30 metres run. The accuracy of the work is most surprising. I cannot see, and architects who have examined the tomb with me cannot see any error in flatness from one end to the other.

This wall has a slight batter, of  $3 \frac{1}{2}$  on 100 vertical: the niches on the opposite side are probably meant to be vertical, though to the eye they appear to have a slight and not very uniform batter; one measured gave 13 only on 1000 vertical.

The passage had been roofed with wood, part of which had been burnt. It did not all come down together and there was a time when the passage lay partly open to the sky and the sand collected in it in heaps. On the edge of these heaps there was great variation in humidity and the plaster for a few inches above the sand would rapidly decay; in plate VI a wavy belt thus left bare by the falling of the plaster will be seen.

The paintings are divided into three registers. Below all runs a band of red edged with black. This exists on both sides of the passage, outside it in the entrance chamber and, at a higher level, in the outer corridor as well. Above it the main register, 1 m. 20 cent. high, consists of a series of oblong frames or trays on a mat background. At intervals of about 4 metres the series



is broken by vertical bars of red which go right through this register and the one above it. We take these bars to be the masts of a tent the floor of which was covered with matting. This was drawn with curious care, in little oblongs of two colours, a yellow and a greenish yellow. These colours must represent the bands of reed alternately above and below the string warp. Of the two colours the greenish shade was far the less stable and has generally fallen away, carrying with it the red lines which represent the strands. The oblongs were plotted out to scale; they measure about 0 m. 145 mill. long by 0 m. 060 mill. high, and were carefully divided into 13 vertical strips, each of which was then further divided by eye into three. The red lines are all very well drawn, evidently with a ruler; there is no sign, even in the longest, that they had been made by tweaking a taut string previously dipped in colour; this method must give a splashed line, but in this tomb all lines are firm and uniform and joints where the pen was redipped are hard to find. What the nature of the pen was is difficult to say. The ordinary reed brush, if slight enough to make the lines sufficiently fine, would hardly hold enough ink to make them so long as we see them. I suspect a stouter reed with a nib must have been used, such as was employed for writing hieratic in later times. At the top of the mat there is a selvedge of 1 1/4 cent. which changes colour with the oblong below it, — when this is yellow the selvedge is greenish and *vice versa*. The pattern of the mat shews through some of the designs, notably under one of the sloping beds where the lines of matting are skew to the main lines of the angarib; in other places, however, we can see that the matting was put in after the drawings were finished.

The colours of the mat were well chosen as we often had occasion to notice while working in the tomb. Openings had been left in the wall built to support the temporary roof and these were hung with mats, the thinner strands of reed in which seen by transmitted light were of a colour very close to the greenish yellow used in the wall, while the reflected light from the stouter reeds was a good match for the yellow.

The designs in this register are reproduced in the series of plates XVI-XXII. Here it will be convenient to give a rapid summary: the numbers given in brackets are those printed on plates XVI-XXII, below the middle of the frame to which they refer.

On the north wall (pl. XVI) were four tall stands surmounted by bowls, the outer pair painted dull red to represent pottery, the inner pair white with wavy lines of red in evident imitation of alabaster. Triangular openings are shown in the stands. The background represents matting.

On the east wall on the extreme left was a seated figure of Hesy, probably meant for a statue: the foot alone remains. Below the statue are three boxes or sacks (?) and in front of them is the first of the vertical red bars which represented the masts of a great tent.

Now there begins a series of objects, most of them trays with ebony frame and floor of light wood either left plain or lined with red leather. The first three above are trays of carpenters' tools (11-13), below are three games, each consisting of a table or board and a set of pieces. On the serpent table some game was played with ivory lions and lionesses and coloured marbles (5, 9); on the ordinary draught board divided into ten by three, were used the fourteen draughtmen and the four ivory rods, two marked red, two black. Below is a game which appears to be rare, played with five white dominoes and five black on a board divided into thirty-three bands, sixteen of them broad and seventeen narrow.



To the right come two trays containing measures (14, 15), perhaps standards of length and weight; the lower row are numbered in tens from 10 to 100.

Next come four objects very difficult to understand, possibly looms (16, 17, 18, 19), then two alabaster tables; these the artist had first drawn in too far to the left and had then painted over; evidently in plotting out his work he began from the north end.

Two rows of tubs of graduated sizes must represent corn measures; the upper tier are of wood and most carefully drawn. Our artist took particular pleasure in the graining of wood and applied it over large surfaces. The lower tier are meant to be of copper.

After another mast (23) we come to bedroom furniture. The laths of ebony and the masts with knob ends and pegs above, fitted together probably to make a frame for a mosquito net. Below these are tables, each consisting of a stand with openwork decoration and a moveable tray (as 25 and 27). Underneath these runs a long strip coloured red and black and probably representing a carpet.

Beyond the next mast (34) begins a row of beds with stools and chairs below them. The first bed is evidently an *angarib* and is seen from above. The next two objects (42, 43) may represent beds but are difficult to understand; they are followed by a series of eight beds drawn in various ways. It would seem that the artist was not tied to a fixed convention in representing such objects and that he made experiments as he went along. The *angarib* (37) seen from above is drawn horizontal, so we must suppose it had four legs, though none are visible. N° 45 is a sloping support with two legs at the head end only; it is seen from the side (similar portable beds in the tomb of Amten, L., D., II, 4; cf. L., D., II, 50). Above it is another *angarib* (44) with one leg only shewn; it must have had two but not four; it is drawn on the slope to indicate to us that it too was one of the inclined pattern. In 46 and 47 two new varieties are drawn, sloping frames with beds of planks instead of leather. Both are two-legged and slope down from head to foot but they are different objects, not two views of the same one: this is clear from the differences of form at the right ends. In 49 and 50 two four-legged beds were to be shewn of a pattern strengthened by struts of bent wood. They had footboards (not headboards, this is the regular usage) and these footboards were shewn in front view in accordance with a common convention. But here came a difficulty. If there were no support to the footboard at the inner side, it would not look well; if one of the elaborate feet with carved strut were drawn in, apparently that would not be satisfactory either; the legs would look too big for the bed. So our artist adopted a compromise and continued the upright of the footboard to the ground, making thus a third leg of different pattern to the other two.

But this was not felt really to solve the problem, so in the last pair of beds (51, 52) the painter tried again and satisfied his desire for symmetry by giving the footboard two supports which had really no existence instead of one. This seems somewhat fantastic, but no simpler explanation will cover all the facts. Two other possible views will suggest themselves (1) that the beds had two plain post legs to stand next the wall and two decorated ones, or (2) that what we have called a footboard was really a little table or box. But (1) while a bed with struts along one side only might possibly be made, a frame with two bulls' legs and two straight posts is hardly to be thought of; and (2) it is very alien to the style to show one object painted over another, and very unlikely that a table would be put at the foot end of the bed.



After the beds and another mast come eighteen different trays, most of them difficult to explain. Those that are clearest seem to have some relation to the toilet; perhaps they are the bedroom furniture. The round ended trays 54 and 56 contain bundles tied up with red straps; the contents seem to be «kherp» sceptres, but this is not certain; there have been alterations here and perhaps the sceptres were a mistake and were painted over; the upper layer of paint representing the corrected design has fallen away and all that is left is the red outline of the sceptres.

The three head-rests in 57 are very plain; 59 and 60 seem to contain eyepaints, 65 pairs of daggers (or more probably razors) in cases; in the narrow compartment below are bodkins and tweezers. The next tray (67) contains a set of tools probably of copper with wooden handles; models of such blades were found in a neighbouring tomb; they may be spatulas for mixing paints and fats. The last two trays in the lower row (70 and 71) represent large and small vases with a spatula and a spoon for use with them.

The upper row of trays are in a worse condition and mostly incomprehensible; even the little detail that is here drawn was not easy to see.

On the other side of the mast on the right are eight frames on which very little colour remains. Four represent boxes with handles for carrying them, with stone bowls and tables inside; the rest I do not understand.

Beyond this the wall is bare; plaster and mud backing have alike fallen.

The end of the wall at the north side of the door is cut off with a slope so as to widen the entrance; and in this inclined piece is a sunk panel with a nearly illegible inscription (pl. XXII Door) and two rows of jars; south of the door nothing remains.


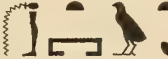
The middle register is filled with geometrical patterns in double bands of black and white with a green border and guide lines in red; it is in poor condition throughout, but can be restored with certainty. Right and left of each mast is a length of a cubit of a chequer pattern; this is the same at each mast, but between each pair of masts is another pattern which changes from one space to the next. What may this mean? It is simplest to suppose that the chequer pattern represents the roof of the tent, the other patterns its sides. The designs indicate woven cloth and not *appliqué* work or matting. A coarse tent cloth made of wool or of goats' hair must have existed, though it is curious that none of it, so far as I know, has been found in excavations. It must be however admitted that the tent hangings in boats in the Old Kingdom as in later times have the appearance of leather work. Our roof patterns are shown on plate XXIII.

The upper register is almost completely destroyed except at the south end; the few hieroglyphs that remain in plates XVI-XX, were picked up from mere spots of red on the crumbling surface of plaster. The large vases, if vases they be, are flanked by some objects (hanging handles? stands?) which were painted red. At the end of this scene (pl. XX) come a set of leopards' skins, too numerous to be intended as determinatives, apparently a supply of rugs. The rough graffiti on the two basins in plate XVIII are an overseer's notes, one probably «granite», a direction to the painter.

At the south end (pl. XXI, XXII) this register is much better preserved and the representations link on with other monuments in a way the picture gallery below does not. Magazines like these



containing supplies of fats and oils appear in the tombs at Medum. They must represent something existing or supposed to exist and, I would suggest, may mean the magazines in the underground part of the tomb. A very probable explanation of the tent is easily found: there was a solemn procession in which the gifts to be laid in the tomb were carried, and these may well have been exposed before the statue of the deceased. It is this ceremony which Hesy's artist has depicted. The tent must have been a necessity for all important funeral ceremonies if they were at all prolonged, as necessary then as it is now for all festivities in Cairo or in the provinces. The masts are still red but the woven patterns have disappeared; the tents are decorated now with gay patterns in *appliqué*.

Pictures of these tents must surely exist elsewhere among the monuments, but I can point to only one example. This is in the the tomb of Pepy-ankh at Meir, where, as I lately had the opportunity of observing, on both the east and west walls of one of the rooms, a procession is depicted going to the 'ibu  after passing through the chapel of the embalmer . The tent is shewn in the more usual Egyptian manner: we see the cross poles and the masts, but no hangings.

In the doorway leading into the painted corridor lay a hawk of limestone about 0 m. 20 cent. high; the head and feet were missing and the whole surface much worn. It was not thought worth reproduction in the plates, but the fact that it was found in such poor condition is of itself of some interest. The bird must have been exposed to the weather for a long time and its original position must have been high up on a wall, probably therefore above a stela fixed over the door. On each side of the door are three niches; these stand out more than they appear to do on the plan, for their face is vertical while the wall of the corridor north of them has a marked batter. The door must have been elaborately painted; it was a very important feature, and represented the south niche of simpler tombs.

East of it is a small room from which open two doors, one leading to the *serdab*, one the way out. On a pilaster in the north wall of this room a little of the frieze remained — a geometrical pattern reproduced in the adjoining figure. The pattern is not common, but occurs in *L., D., II, 87*.

The doorway into the *serdab* is well preserved and in the east face of it a heavy wooden hasp was still in place; below it we picked up a bit of stout palm rope. A similar hasp, in poorer condition, is in the doorway to the east.

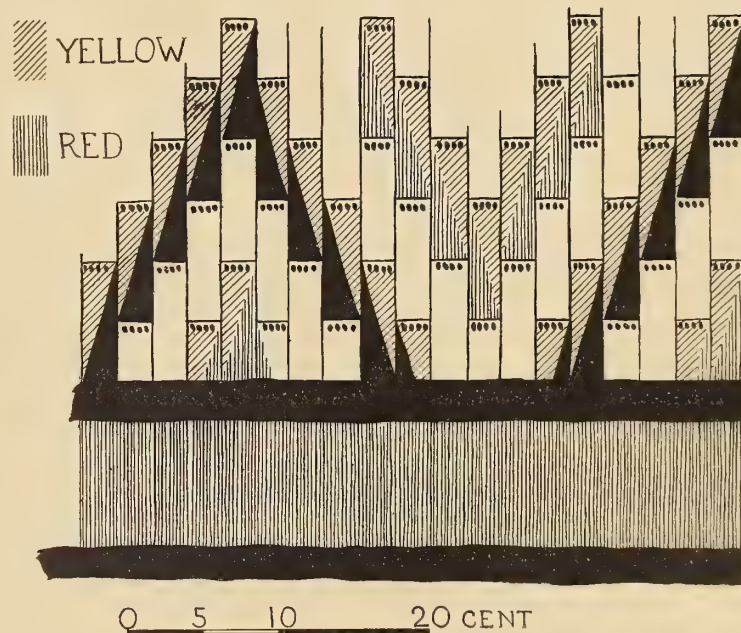


Fig. 1.



Inside the room the north half was plastered, but in the southern half the walls had always been left bare and here, at the end, the floor was covered by a large slab in which three rectangular sinkings, 0 m. 01 cent. in depth, had been cut. Here too was found a tall, cylindrical lampstand of good red pottery. It seems likely that three statues once stood here, walled off in darkness from the rest of the room, and that there would be a small chink in the wall to admit the smoke of the incense.

In the brickwork east of this chamber two vertical joints will be noted on the plan: the first is between the wall and an outer skin added afterwards, the second between this and a mastaba, presumably that of a relative of Hesy's, which was built later. Underneath it is a vertical shaft leading to a chamber on the west side. In the passage in front of it were a lot of the minute egg-cup and saucer-shaped pots used for offerings given to the dead.

North of the entrance is another mastaba, the shaft of which was dug out; it is deep and leads to a chamber on the south.

The outer corridor is a very narrow passage. Both its walls are built with a batter, that on the west being very marked. On this are the remains of a frieze which would have been of interest if it had been less fragmentary. A crocodile waiting at a ford was complete and besides this four oxen and two human figures were distinguishable. The hair on the legs of the oxen is represented by short stippling strokes, somewhat unlike anything seen elsewhere. Unfortunately there was little in a condition to be copied.

At the north end of this corridor is a simple niche, the back panel of which is painted as grained wood, with a red hinge on the west side. The two panels flanking it are painted in horizontal bands of green and yellow, covering the upper half only; a black band forms the base. On the next two faces (E. and W.) there is the green chain pattern, on the next (N. and S.) nothing, on the outer faces chain pattern again.

North of this niche is a mass of brickwork filling the narrow space between the mastaba of Hesy and another. There are gaps now in the brickwork but these appear to be intrusive burials. It seems that the north stela was masked by this brick walling, but the white plastering of the west wall of the corridor is continued through the blocking. It may be that the stela at the north end of the corridor was an afterthought, and was intended to replace the original north niche.

There were originally three doors into this passage. The first, to the north, was found open; it leads into a small room the walls of which still stand 2 metres high and are covered with white plaster. The second and the third (S.) were blocked with walls now standing half a metre or more lower than the walls adjoining them; they are of bare brick on the inner side, but plastered on the outer; this corridor was evidently not meant to be seen. No way indeed was left open into it, but the walls had been plastered before these doors were blocked, so there must have been some reconstruction.

The second door east of the corridor led into two rooms; in one of them there had been a fierce fire which has reddened the bricks. This room, the southern one, is small, and is in the thickness of a stout wall which has been added to the east wall of the corridor.

Turning now to examine the body of the mastaba itself we see that in the body of the brickwork there must exist another corridor parallel to the main one, of the same width and with



similar niches along the west side, but not so long. We did not dig much more of it out than had been cleared by our predecessors, but there was enough to make the nature of the passage clear. The brickwork was covered with mud mortar, but not plastered nor painted. The north end of this corridor is where it is shown on our plan; it never extended as far as the painted one. Beyond it is a joint, in which we see a surface, built with a batter and plastered, which at first led us to suppose that the tomb had been enlarged, that the hidden niches were intended to be the final ones, and that with the enlargement of the plan they had become useless.

It is more likely that another explanation of the vertical joint must be found and that the niches were from the first intended to be hidden. There is a parallel in another tomb (not yet published) where there are two south niches, one outside, the other embedded 2 metres deep in the brickwork. The hidden corridor is carefully filled in with brickwork into which we tunnelled so far as to get the elements of the plan of niches.

The stair was not completely cleared; the part left is filled with good brickwork and it did not seem desirable to sweep this away merely to get a few alabaster vases.

One hole was made far north of the shaft, and in this we came down upon a narrow brick stairway with plastered sides. The wall east of the shaft is set back half a metre and has a vertical face.

The opening marked *shaft* in pl. I is the end of the stair. On its north end it is bounded by a vertical wall, of good brick in its upper two thirds, below that of stone (*dabsh*) and mud. Under this are the last few irregular steps of the stair cut in the rock. On the other three sides rises the brickwork of the mastaba; on the E. and W. there are vertical joints, but at different distances from the shaft. These perhaps mark the walls that were built round the stair at the beginning, so that work might safely be carried on below ground and above at the same time.

It was not clear in what way this shaft had originally been closed. It had been opened more than once and when we found it was filled with loose earth, stone fragments, etc. : if it was ever filled with solid brickwork it is strange that no trace of this was noticed.

Opposite the mouth of the main group of chambers part of the great portcullis remained, and the slot in which it fell is to be seen in the rock above. There was no second portcullis at the lower door.

On the higher level two long chambers open in the side of the shaft and run north. The shaft had lain open at some time and rain had penetrated; the floors were covered with about half a metre of earth which had become converted into mud and had dried with a crackled and split surface. In this many fragments of stone bowls, some of a very large size, appeared; these were duly marked with the number of the chamber in which they were found, and when the fragments came to be fitted together it was clear that either the bowls were broken before they were buried or that the disturbance made by robbers had been very great, for fragments from three different chambers were often found to fit together.

The two chambers to the east of the entrance chamber are very rough. Part of the walling which closed it remains in the entrance to one of them; it is made of limestone and plaster, with good hewn stone as a foundation. The doorway in the S. E. corner is built up with limestone and plaster, rather carelessly laid. Some blocks are well squared and of good white stone, others of the cherty stone which may have come from the excavation of the tomb itself.



The door in the N. E., near the entrance, was also once blocked by a wall of brick and stone covered with plaster; through it we pass into a corridor running N. and S. from which open a series of magazines the doors of which were once masked in the same manner. The walls too of all these magazines are very rough now, but were once neatly plastered.

The passage narrows to the south and in the wall of the narrower part there is, cut through to the burial chamber, a hole the use of which is not clear. It is like a rough cupboard, with its floor about 0 m. 90 cent. from the ground. One side is vertical, following a natural fracture of the rock, the other two are very rough and unfinished. In the back wall a horizontal slot 0 m. 50 cent. wide and ca. 12 high has been cut; through it we can see into the burial chamber. Whatever its object, this cutting evidently belongs to the period of the tomb. If it had been made by robbers the final hole would have been deeper and less wide. It is interesting here to see that metal tools were undoubtedly used in the excavation; in the softer bands of clayey yellow stone the deep prints of chisels are numerous and clear. The cutting edge was just over 0 m. 01 cent. wide. On the harder stone chisel-marks have not been noticed; the stone was bruised by hammers of diorite or basalt.

The small chamber on the left at the end of the passage is very rough. Comparison with other tombs to be published in the next report makes it likely that this was a latrine, but no one would come to such a conclusion from inspection of this tomb alone.

Turning to the right we now find ourselves in the main, the real, burial-chamber. It had, of course, been robbed and was half full of broken stone. The walls are rough; on the roof one can see the long (0 m. 50 cent.) curved strokes of the chisel, and on the hard cherty bands the white stars from the blows of the hammer. The central part of the floor is sunk about 0 m. 30 cent., a band 0 m. 50 cent. wide being left N. and S., a narrower one (0 m. 15 cent.) to the west and a broader (0 m. 90 cent.) to the east. On the bands to north and south there still remain the two ends of a very thick (80-90 cent.) wall built of limestone rubble and plaster. It was left quite rough on the inner (W.) side, fairly flat and with the joints smoothed over on the east. The space left behind it (80-90 cent.) is sufficient for a coffin. These walls now stand about 1 m. 30 cent. high but once went probably to the roof (cf. pl. XXV, 3).

On the wider border to the east is a bench built in long steps made of good limestone blocks 0 m. 40 cent. to 0 m. 80 cent. long; the steps are 0 m. 20 cent. to 25 cent. high and of the same width. One block is 0 m. 85 cent.  $\times$  0 m. 23 cent.  $\times$  0 m. 23 cent. The finish of the blocks is rough, but it seems that the bench was built in steps as we see it; its form is not accidental or the result of robbers' labours though several of these blocks were found loose in the filling.

Among the rubbish were found the small seals of clay with imprints of the name of King Neterkhet (pl. XXVIII) and also some fragments of one or of two human skeletons. There was the front part of one skull with the forehead curiously retreating, and part of a very slender humerus. If these were Hesy's he was singularly unlike his portraits. The humerus, at any rate, seemed to be that of a woman.

The bones were very fragmentary but deserved more study than they obtained. I had left them in the burial chamber till toward the end of the season, intending then to pack them up and submit them to an anatomist. The man whom I sent down to fetch them was attacked halfway



down the ladder by a swarm of fleas; it was hardly humane to send him further; the fleas would be dead, we knew, before the autumn and till then we could not leave the bones in a safer place; they were on one of the stone steps in the burial chamber, quite inaccessible after we had drawn up the top ladder, and in a dry and equable atmosphere. In what Museum could they be more secure? But we had forgotten the owls, and a fine bird, a solitary barn owl whom we found still in residence the next October, swept over our bones with his careless wing.

As the last proof goes to press I notice an omission; it should have been stated that in the filling of the shaft were some bones of wild duck — of more than one bird — doubtless part of the funeral meats in the underground chambers.

This account has been made intentionally short, perhaps too short; I have avoided pointing out what is obvious from the plates and have often passed over difficulties which I could not remove. On the copies time has not been spared; the main value of the report lies in them and more especially in the coloured ones. These represent much labour under trying conditions for which I desire to express my indebtedness and gratitude to my wife.

For the sketch of pl. V and part of pl. II I have to thank Mr. Darke.







## DESCRIPTION OF PLATES.

PLATE I. — Plan of the tomb. The main corridor has eleven niches on the west side, each one with a wooden panel at its back; the wall opposite to them is the one covered with paintings. The entrance to the corridor is through a gate at the S., flanked itself by three small niches on each side. It represents the south niche of the ordinary III<sup>rd</sup> Dynasty mastaba. The north niche is duly in its place. Outside, to the east, is another corridor, once decorated with a frieze. Both the entrances to it have been blocked, apparently at the time of the original burial. There is a niche painted as wood at the north end. The east wall of this corridor is extremely thick and a straight joint down the middle of it shows that it may not all have been built at one time. Two other separate mastabas are built on to the doubled wall on the east. South of the entrance to the corridor is a room, at one end of which, in the floor, lies a block which seems to have served as a base to three statues.

The mastaba west of the corridor is an almost solid mass of brick but the shaft had been plundered in antiquity; we cleared it again, and, in addition made one hole into the stair north of it. Previous diggers had disclosed at two points the hidden niches which appear to exist in a long line built into the brickwork. Vertical joints, which are indicated so far as they could be observed, show that an outer skin was added after the building was nearly finished and that, possibly, the tomb had been previously enlarged.

PLATE II. — The section shows the great depth of this "three-decker" tomb. Black indicates brickwork, dots gravel, hatching limestone. The uppermost of the three underground levels is shown in plan below with sections of the burial chamber on one side of the plan. A portcullis closed the door here, but no blocking stones were found at the two lower levels and there was no groove in the rock for them to slide in.

PLATE III. — This is a general view of the tomb from the south taken just before the painted corridor was again filled in with sand. The little pillars of brickwork with their tops at one level are modern; they were built to support the temporary roof which sheltered the passage during the months while it was being copied; to this roof the wooden rafters belonged. On the left is a survey mark; on the right of the main corridor is the outer passage with a niche at the far end. The room on the right in the foreground is the serdab. In the background is another mastaba with brick walls and a filling of stone chip.

PLATE IV. — 1. The painted corridor looking north.

2. The best preserved of the niches.

3. The corridor as seen while the copying was proceeding.



The batter of the west wall in the outer corridor will be noted, as also the height of its painted frieze and the blocking at its south end. On the right in the foreground is the chamber which we suppose to be the *serdab*. In the doorway the wooden hasp to which the door was fastened was found in place; a rope end of palm fibre lay below it. This hasp was pulled out one night this year by some marauder, but not taken away, so it has now been brought to the Museum. It is a solid cylinder of hard wood, probably *sont*, 0 m. 60 cent. long and 0 m. 15 cent. in diameter. At the exposed end there is a flange; the inner half is wider and rougher and near the end a round hole about 0 m. 04 cent in diam. has been bored, evidently to hold a cross-bar which would secure the little beam in place.

PLATE V. — Mr. Darke's sketch is taken from a point a little north of the northernmost niche; the new wooden panel is seen in position on the right.

PLATE VI. — This was the best photograph we could obtain of any large area of the painted wall. Some of its patchiness of tone is due to the use of varnish, applied at different times and of various degrees of dilution. If the paintings had been left as they were found they would have fallen long before they could have been copied, so a prompt application of varnish was very necessary. The best spirit varnish diluted with 3 to 4 volumes of alcohol was found to be the most effective; a thicker mixture does not sink far enough into the plaster and bits of the superficial layer may curl up along their edges and detach themselves, while a dilute varnish repeatedly applied will sometimes consolidate a very fragile material.

PLATE VII. — 1. A single frame, that of the lion game (cf. pl. XI). This is as good a photograph as could be obtained without special plates or colour screens, and even with these, not much more could, I think, have been made out. It is a fair representative of the better preserved parts of the wall.

2. The only well preserved drawing in the frieze of the outer corridor. It shows a crocodile waiting at the ford. This piece has been removed to the Museum.

3. The wooden panel from the niche furthest to the north, the only one of those left by Mariette that could be removed.

PLATES VIII and IX. — The patterns on the niches reduced to  $\frac{1}{5}$  linear. The diagram above shows the order in which they recur; in the even numbered niches the design numbered 5 is on each side of the panel, in the odd numbers the design n° 8.

The height of the designs from the floor reached 2 m. 15 cent. and above that other patterns took their place. None of these last remained, but a square edge to our designs at the same height in 5 different places showed that something new, projecting probably beyond the usual surface, had once existed at that level. These elaborate false doors are, of course, well known and have been published before, in Perrot-Chipiez and elsewhere; a good facsimile is in Borchardt's «Ne-user-Re», but a few details are shown more clearly in this tomb, notably the method



of stretching the hangings tight by a cord running through a series of loops and round a horizontal rod. It is clear, too, that the hangings were the inside decoration of a room and that some of them were woven patterns. These are, of course, much the oldest examples known.

PLATE X. — One of the best preserved patches from the upper register : a line drawing is on plate XXI. Much of the colour has fallen away and left different stages of the work visible. The first sketch was made roughly in yellow paint, a second much more carefully in red and a third outline in some parts in black before the colour was applied. The red caps spotted with white dots which surmount the stone vases are evidently meant for beaten metal, probably for gold. Such gold caps were found by Petrie at Abydos (*Royal Tombs*, II, pl. IX).

PLATE XI. — Three boards for different table games, each with its tray of pieces. This is very well reproduced but is of course very much clearer than the original. The only fault is that the lines in the mat are not straight enough; they all appear, in the original, to have been drawn with a straight-edge. The oblongs of two colours, yellow and greenish yellow, into which the mat was divided, were not very clear in this part of the wall.

These games are shown also on plate XVI.

PLATE XII. — On the left is the design which we have called a loom, rather to give it a label than from any conviction that this is the correct explanation; on the right a drawing of the same size as the first and its near neighbour on the wall, possibly another view of the same object. (see p. 24).

The yellow table which appears underneath the drawing had been put in by mistake and painted over again by the original artist. The hieroglyphs too and the line scrawled below them were notes or brush trials made by workers before the design was finished. Neither the table nor the hieroglyphs were intended to be seen.

PLATE XIII. — The four tubs at the right end of the row in plate XVII, two of wood, two of copper. They were used, probably, for measuring corn. Above two of them are, as I suggest, the strikers (see p. 26), the tools used for sweeping over the edge of the barrel when it was overfilled, so as to give a struck and not a heaped measure. Here again, though the mat background is fairly indicated, the vertical lines should be straighter.

PLATE XIV. — 1. Tray containing three headrests of different patterns (n° 57), two of ebony, one of white wood.

2. Tray containing object of unknown nature (n° 55).

PLATE XV. — Fragments of wall decoration found in filling, copied in colour but reproduced in monotone. N° 1 should be turned round and viewed from the left side; n°s 4 and 5 are interesting as showing that human figures were admitted in some of the scenes. As none appear in those still standing we at the first supposed that they had been intentionally avoided, and it is

not, indeed, certain that any existed in this corridor; they may all have been outside. Nos 7-10 must be from the row of magazines in the upper register, 11 from a design high up on one of the niches, 2 from the row of handled boxes on plate XXII.

PLATES XVI-XXII. — These give the whole of the designs on the end wall and the main (east) wall of the corridor. They were drawn to a scale of  $1/5$  and are reproduced at ca  $1/11$ . The background of mat has been omitted and when the detail was too minute to be easily shown on this scale a copy was made of natural size and from this a *cliché* made for insertion in the text.

The patterns in the middle register are shown only in patches; they might have been filled in pretty safely right through, but this was difficult to do on the small scale and would have given a very false idea of how much there was really to be seen.

In the upper register very little indeed is left, and, except at the south end there is no colour; the few hieroglyphs were recovered from broken and faint red outlines.

PLATE XVI. *North End*. — Four stands with basins above them, two of alabaster, two of red pottery. Cf. plate IV, 1.

*East Wall*. — At the north end must have been a seated statue of Hesy; only the foot remains, but it is so close to the mast that it could not belong to a standing figure. It is red and the sandal straps are black.

1, 2, 3. Below are three objects similar one to another, looking like tall tapering boxes on feet; the central one is white with black spots, its middle part covered by some hanging of white colour with tassels below; the one on the right is yellow and it is not clear if it has feet or not; the colour of the smaller one on the left can no longer be determined. They are perhaps sacks represented as half filled and with the upper part hanging over.

4. Next comes a vertical bar coloured red. Similar uprights recur at intervals of about four metres and we shall see reason for explaining them as the masts of a tent the roof of which is represented by the black and white geometric patterns of the second register.

From here to the end of the wall a series of oblong trays are depicted laid out on a background of matting.

The mat is bounded below by a broad belt of red edged with black, which runs down both sides of the passage at a height of 0 m. 60 cent. from the floor, and above by the second register which consists of a double band of lozenge patterns in black and white bordered by strips of green : a great deal of this band is destroyed.

We will now take the trays in the main register one by one.

The first six are shown in colour in plate XI; they are evidently three pairs, each consisting of a board and a tray containing the pieces to be used on it.

5. The circular table in the lower row with a stand projecting on the right side is the serpent game shown in Rashepses (L., *D.*, II, 61). A board of limestone made for this game was found years ago at Ballas (PETRIE, *Naqada*, pl. XLIII).



The head and neck of the snake retain much of their colour, black with streaks of yellow, but of the detail of the seven coils little remains, most of the colour having fallen; what is left is generally greenish yellow. Red cross-lines at intervals of about 0 m. 01 cent. cut the coils up into

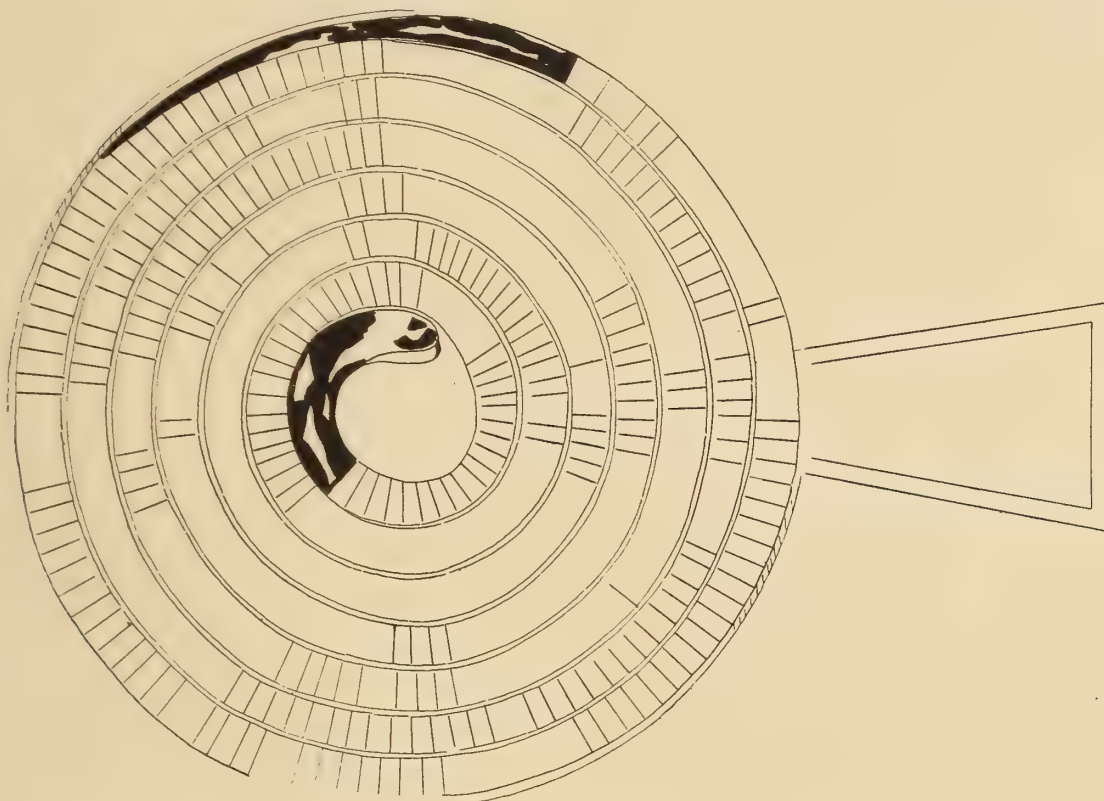


Fig. 2.


a large number of divisions, nearly 400, but they cannot be counted with certainty. The narrow spaces between the coils are of a lighter tint, showing that the original colour, perhaps a green, has fallen away. At the top a narrow tapering arc, black with yellow streaks, represents the serpent's tail and outside this is a cord pattern of red lines on white.

The projection to the right of the circle represents the stand of the board; it is of a greenish yellow with lines in red. In the scene in Rashepses the two players are sitting close to the board and the stand is placed between them, projecting above it. This tomb was opened again some years ago in order that Lacau might check a scene in it and we then observed that there is a slight error in Weidenbach's drawing. The objects held in the outstretched hands of the players are certainly animals, either dogs or lions. This then, confirms the idea which the arrangement of the playing boards and trays of pieces in this scene suggests, that the lions of tray n° 9 were used on the serpent board.

6. This is a small, nearly square tray, the frame of which, like nearly all those to come, is painted black with wavy streaks of yellow, sometimes edged with red, drawn over the black with a bold brush. This doubtless represents some ornamental wood, an ebony from the Sudan,

and will sometimes be so described in what follows. The interior of the frame is red and on it appear four white rods, round at the tips and marked near each end and in the middle with pairs of lines. On the two outer rods these lines are red, on the inner ones they are black. They were probably thrown like dice : ivory rods like them were found in an archaic tomb at Nagada (PETRIE, *Nagada*, pl. VII). Left and right of the rods are two sets of bullet-shaped pieces, 7 on each side, those on the left shorter and more pointed than those on the right; all are now colourless but originally they were doubtless green and blue.

7. Below the stand of the serpent game is another board with ebony frame and red lining. On it are laid ten oblong pieces like dominoes, 5 black and 5 white; there are no marks on them. (Similar objects in *Nagada*, pl. VII). Farther to the right are three more rectangular frames one above another.

8. The uppermost is the common draughtboard divided 10 by 3. It has no frame, is painted yellow with white cross bars outlined with red and is meant for a box, not for a flat board. Five squares are marked, not very legibly, and traces of two signs, one a , carelessly written on the wall in red paint before the decoration was put in, show up now through the falling colour.

With this board were used the pieces of n° 6.

9. This is the best preserved of the games : it is 0 m. 22 cent. long by 0 m. 19 cent. high.

It depicts three lions and three lionesses of ivory on flat yellow bases. The lionesses have collars. Behind each of the animals is a set of 6 balls like playing marbles. The colours of these are indistinct except in two sets, the middle one on the left where the marbles are dark red, and the top one on the right, where they are black; from the others the colour has mostly fallen away. Probably there were only three originally and these were the same on each side. As now visible they are on the left (1) a darkish colour, now faint (2) dark red, well preserved, (3) greenish yellow : on the right (1) black (2) colour gone except two pinpoints of red, (3) indistinct.

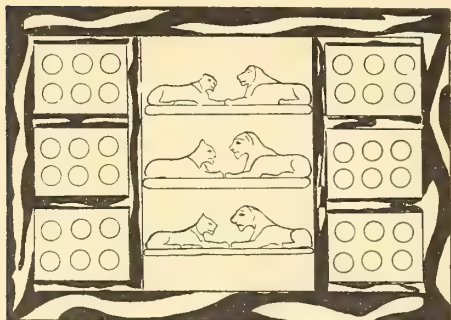


Fig. 3.

Lions and dogs were found in the Mena tomb at Negadah (DE MORGAN, *Origines*, II, p. 192), marbles and lions in an archaic tomb in another cemetery in the same district (PETRIE, *Nagada*, pl. VII). They were used for playing the serpent game at which, apparently, as many as six people might play together.

The game may easily be imagined. One player took a lion, one a lioness and each advanced his animal along the coils of the snake by so many points as he won. This was decided by his success in guessing how many of the coloured marbles and how many of each colour his opponent held in his hands. It would not be difficult to draw up rules for a game on these lines : it would not be a game of chance exclusively; there would be room for a great deal of skill and quick observation, just as there is in *mora*.



10. This is a long board or box coloured in alternate bands of yellow and greenish yellow with red outlines. There is no detail in the bands and no outer frame. On this the pieces of n° 7 were used. This game is very rare, and with so little evidence, it is impossible to say how it was played. It occurs at Medum (PETRIE, *Medum*, pl. XIII, left) and on the floor of the entrance chamber of the tomb of Mereruka at Saqqara lines similar to those on this board have been scratched by people who had taken refuge there from the sun.

11. Turning back a little to the upper part of the register we have on the extreme left a tray, the corner of which is broken away. The frame is black and yellow, the inside is coloured a red tint — brighter than brick colour — nearly Indian red. On this is shown a group of tools. An axe with curved handle and round blade is easily seen; the wood is yellow with parallel lines of red representing the darker fibres, the blade and its attachments are both bluish black. Diagonal lines of red representing the ties show underneath the colour.

Below the axe is a large chisel, the blade of the same bluish black, the handle of a dull coppery red quite distinct from the bright red used for the lining of the trays; it seems to be used for copper and perhaps for some woods. Very little more can be made out from the indistinct patches of colour on this tray.

12. To the right of this is another tray, closely similar to the last and better preserved. The frame is again black and yellow, the lining red. In the middle is an axe with curved handle and round-edged blade, the wood, as before, light yellow with long parallel red lines to indicate

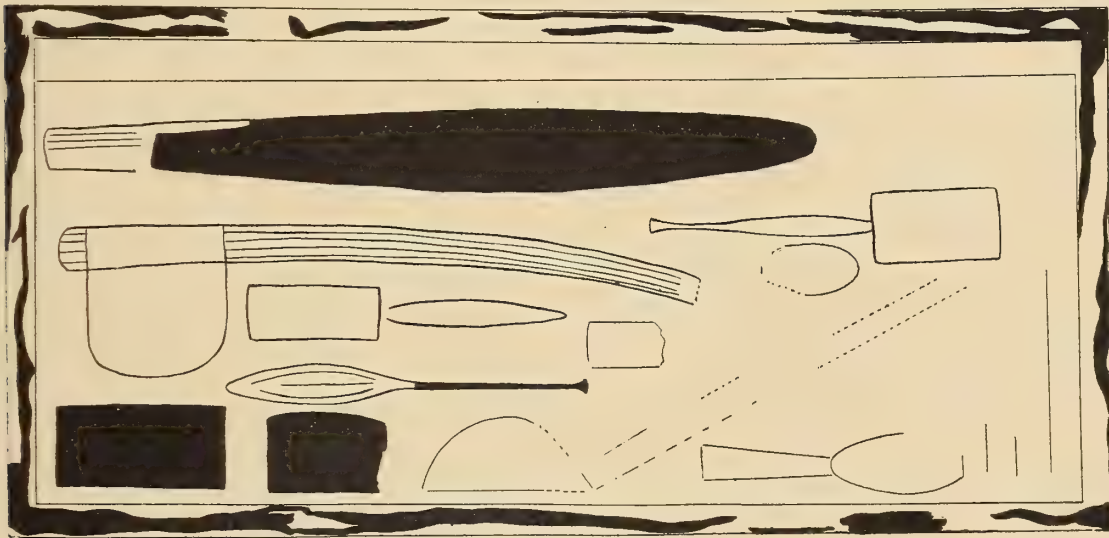



Fig. 4.

the fibre, the blade dull red, the fastenings to the haft blue-black. Below it is a pointed chisel with blue-black blade and handle of dull red and, lower still, a long metal tool with an oval wooden handle painted yellow with red lines of graining. It looks like a wooden *spatula*, but this cannot be; the wood part must be the handle.

Low on the left are two objects painted black with some light streaks; one is perhaps oblong, the other certainly rounded at the top : they may be hammer stones or emery polishers. To the right is a  like the top of a drill; it is in dull red on the brighter red ground, but could have been clearly enough distinguished were not its right side broken away. The colour suggests an object of copper but it might equally well be a drill cap made of red stone.

The next object to the right is very indistinct; it is long, like a rod, and lies slanting across the board; there are spots of yellow remaining and a bit of straight line marking the edge, but most of it has gone and little more now appears on the red ground than a sloping white streak which would have been taken for an accident but that a similar streak sloping in the opposite direction, and in a similar position with respect to the drill cap appears in the next tray. Perhaps the bow of a drill was the object intended.

Below this, in the right hand corner, not easily seen, is what looks like a mallet, but is more probably a large chisel with a dark blade to the left and a long, flat-headed handle on the right. Above the axe is a large saw; its outlines are somewhat indistinct and the teeth cannot be distinguished; the colour of the blade is bluish black. The handle is of yellow wood, and a narrow tongue in extension of it runs some distance along the top of the blade. It is surprising to find the axe and the saw of different colours and I do not know what material may be meant by the dark colour of the saw. One is inclined to suspect iron, notwithstanding all the difficulties.

Below this to the right another chisel can be distinguished; its handle is an ill-defined oblong patch of purple red, the blade long and of the same colour. A conical patch of this same dark red, just below the long blade, is another chisel-handle or the cap of a drill.

Along the top of the tray just below the upper band of the frame is a long strip of dark red the meaning of which I fail to see.

13. In the third tray of tools there is much the same arrangement. In the middle is an axe, coloured as before; below it some patches of the purple red must mean the handle of a chisel. Lower and to the right are the two objects in black, the larger one oblong, the smaller with a curved top. To the left of these are two is the large drill cap (?) in red and from it there are traces of lines running upwards exactly as in the last group, but this time to the left, instead of to the right. They indicate perhaps the bow of a drill but, as has been already said, so little is left in either case that had it not been for the symmetry of the two drawings we might have taken the marks as accidental.

Above the handle of the axe is a chisel and above this again some long object which we have not had in the preceding trays. It is purple red, is forked at the right end and the ends of the fork are tied together with a cord painted blue with red outlines : the colours are exactly the same as on the ties of the axe-handle below. This is doubtless the tool represented in the well-known scene of the joiners on the inner wall of Thy; what its use was seems not to be known. A band of dark red runs under the upper bar of the frame.

14. We now return to the lower row, to two almost identical trays (14 and 15) containing weights and perhaps measures of capacity. They are of ebony with red lining, as usual. At the top are two long objects of wood, each provided with a small projection at the middle point.



That on the left is of ornamental wood about 0 m. 20 cent. long; its exact length cannot be measured nor indeed can I be sure if it was square at the ends; they are rounded now, but this may be due to accidental wearing away of the paint. The longer measure is about 0 m.

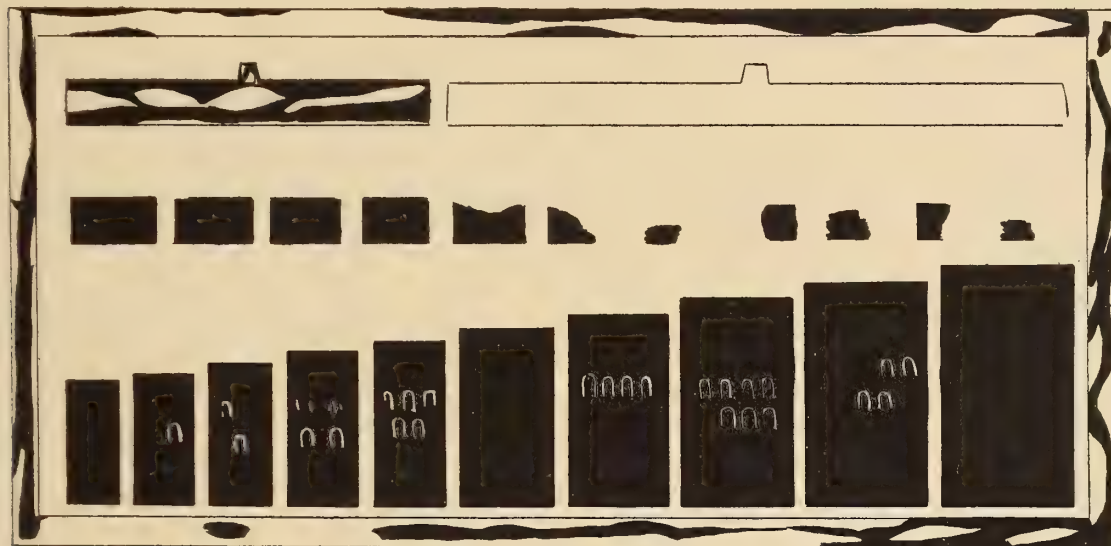


Fig. 5.

34 1/2 cent. long and is painted yellow with red lines, much like the axe handle. It is probable that we must see in such objects measures of length, but projecting handles on such implements look curiously modern.

Below these come a row of small weights or measures of capacity, originally eleven in number, diminishing slightly in size from left to right. In the lower are 10 tall black measures increasing in size from left to right; some traces of signs written in white make it clear that they were numbered 10, 20, 30 etc. to 100.

15. The description of 14 is almost sufficient for this too, but there are a few differences. The wooden rods are both white owing to the colour having fallen away and we notice that the red background representing the bottom of the tray was here put on last; it does not exist under the rods. They are both provided with handles and the ends seem to be bevelled; the lengths are about 0 m. 205 mill. and 0 m. 35 cent. The small measures, originally 15 in number, have little projections at the top, bottom and middle as if they were hooped cans. This feature is not visible in the last tray and it points to these dark objects being intended for liquid measures rather than weights. The lower row are again tall oblongs, but narrower than the first lot; they were numbered in the same way.

16. This and three that follow it I do not at all understand and must describe them in considerable detail so that any suggested interpretation may be readily checked.

The object (fig. 6 and pl. XII) whatever it may be, is represented as an oblong, higher than it is wide, and bounded by a single red line. At the middle of each side black half-moons

project from the frame. The interior is divided into narrow vertical strips, alternately white and yellow, about 30 of each colour, diminishing in length from the sides towards the middle, and

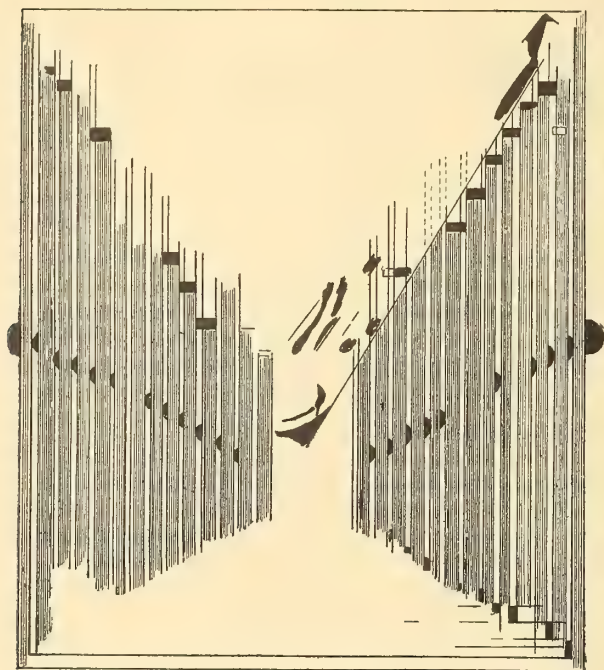


Fig. 6.

leaving two blank triangular spaces, of unequal size, the larger one above, the smaller below.

In these triangles very little colour remains.

Each pair of strips is capped by a little oblong of black and each white strip has a black foot.

From the projecting half discs of black, lines of similar but smaller discs slope down towards the base; they are placed only on the white strips. Each pair of them might belong to a rounded bar passing behind the vertical slats. From above the point where these two lines of black crescents cross, there extends to the right upper corner of the frame some object painted yellow with streaks of black, the colours that generally denote ebony. It is narrow above, wider and, as it seems, forked below; the ends are square.

17. This is evidently the same design as n° 16. Less detail is visible, but one point is clearer. This frame, and therefore doubtless the last, had a narrow border of bright red. Inside this the vertical strips diminishing towards the centre alternate exactly as in the last frame; here their colours are white and a dark ochre. The sloping bar of wood (?) is fairly visible and both its ends are square, but if it divides or is a single bar, if it is broader below than above it is impossible to determine. Of the two discs projecting from the frame but one remains, and this only in red outline, the colour having all fallen away.

The sloping lines of half moons on the white strips are plainly visible, but they are here yellow not black and the oblong caps above each pair of stripes are of the same colour.

These two designs are very difficult to understand. One possible explanation that has occurred to me is that they are looms, that the two black discs in 16 are the ends of the beam and the

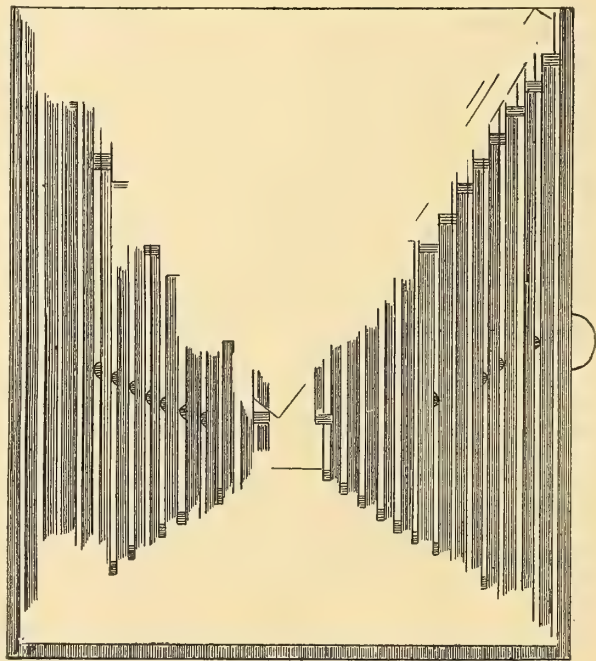


Fig. 7.



narrow vertical strips the reed; the diagonal of wood would then have to be some, to me unknown, form of shuttle. But I am far from pretending that this is a likely way of representing a loom, or that I could demonstrate in detail how such a loom would work.

The design of the hanging red cloth (?) in n<sup>os</sup> 18 and 19, is of exactly the same size as the two under discussion; this makes it tempting to see in the pairs of drawings views of the same object seen from different sides, and suggests that the two half-discs of black in n<sup>o</sup> 16, are the ends of the black rod or beam which appears in n<sup>o</sup> 18.

The designs n<sup>os</sup> 16 and 17 look oddly like musical instruments which occur in other parts of Africa, but not in Egypt; had the Egyptians used these, they would surely have shown them with cheerful iteration in other tombs, and, if they were intended here they would not stand alone; other instruments would be depicted with them. The position on the wall makes it probable that some tool or machine is intended. A sieve is just possible.

PLATE XVII. — 18. In this drawing two features appear which are accidental and must be imagined away before an attempt is made to explain the design. The two hieroglyphs were scrawled in red paint by a workman before the decoration was applied; they were then painted over and disappeared till the decay of the picture brought them again into view. It is unfortunate that the graffito should become illegible just where the king's name should stand. The other extrinsic feature is a yellow table drawn in by mistake; it is repeated in its correct position further to the right (pl. XVII); it too was painted over and now shows faintly through the red of the fringed cloth.

The horizontal bar is black; a red cloth (?) hanging from the upper line narrows down to the bar, spreads again below it and terminates in a narrow green border and a fringe.

The frame is of exactly the same size as n<sup>o</sup> 16 and the two may represent different views of the same subject; 17 and 19 would then form another pair. If the guess that n<sup>o</sup> 16 is a loom is correct this may show the woven fabric issuing from it, but the explanation is not convincing.

19. This is closely similar to the last but the horizontal black bar is missing and the background is red instead of white, the cloth (?) white in place of red. A second table painted by mistake shows through the design.

20 and 21. To the right are two tables, redrawn in their correct positions. They are yellow with red outlines and are meant for alabaster.

22. Between and below n<sup>os</sup> 18 and 19 begin the long rows of barrels. In the upper row the first four are white, the rest are wood, elaborately grained, with ebony hoops.

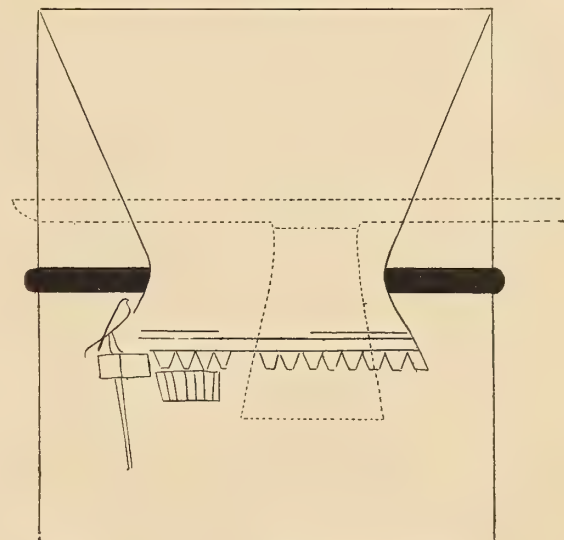


Fig. 8.

The lower row are dull red with yellow hoops but here too the smallest four are different; in this case they are red all over. The wood graining on some of the tubs is done with great skill and is closely copied from reality; every fibre is followed to the edge of its plank and in the acute angles where the fibres turn round a knot dark shading is put in. This graining is best shown in the largest tub but one, where five planks are clearly distinguished.

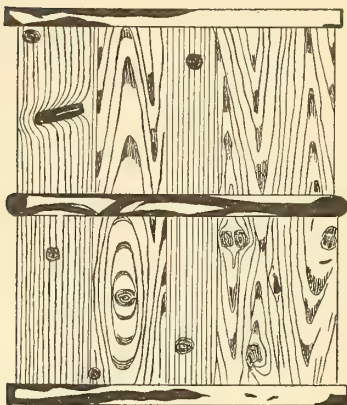


Fig. 9.

It will be noted that real cooper's work is intended, — barrels with bevelled staves. The hoops at top and bottom are square in section, those in the middle are rounded.



For what material the red colour of these tubs is meant is not certain. Copper is most likely but one would have supposed it too dear at this time to be employed so lavishly, and also that, if it were used, it would be honoured with the more expensive ebony hoops. Earthenware would be of course impracticable; it would break at the hoops.

The two largest tubs have what look like lids above them, but as it is not clear why they should need lids and the smaller ones should not, it seems likely that these are the 'striker' for determining struck as opposed to heaped measures. These then will be Hesy's corn measures, most necessary utensils for receiving rents in a moneyless land.

So far I had understood the drawing, but had not noticed, till Griffith pointed it out to me, that the sign *ked* must represent this striker and not, as has up to now been stated, the plasterer's float. Explained thus as a tool for measuring corn it becomes the most natural symbol for a boundary or limit.

23 and 24. — Next comes another red mast and after it a lot of tent, or more probably, bedroom equipment. Above are four poles or rods of wood, coloured black and yellow with square ends. To the right of them are four long tent-poles and further still two rather broad slats, from all of which the colour has fallen, though in four of them enough was left for it to be safely indicated. Under all these run two long rods probably also yellow and black, but the detail, if there was any, has fallen away and only at the left end two cross marks in red remain with small arcs at the two corners.

All these formed probably the frame for a mosquito net. In several tombs, in Mereruka for example, a bed is represented with a wooden canopy over it which could have had no object but to suspend a net. Some of the fine muslin-like cloths that have been found in this cemetery would be very efficient for the purpose, and we cannot doubt that the need for mosquito nets was even greater then than now. There is an allusion to them in Herodotus (II, 95).

25. Below these at the left end, just after the red mast, is a small table with box top, painted yellow. In the side was openwork carving of  and  signs, now destitute of colour, but as the yellow on the rest of the little table is nearly complete we can be sure that the fretwork design was in another and more fugitive pigment.




The drawing of the signs is singularly uniform and accurate. It is striking to find at so early a date an object like this which would seem perfectly in place in a New Empire tomb.

26. Below this and running along under all the articles of furniture up to the next mast is a long band painted in strips of three colours, black outside, then red and yellow in the centre. This was, I suppose, a carpet for the tent or bedroom.

27. This was a large tray with a broad frame of ebony and inside of the ordinary yellow wood with graining carefully done in red lines; the planks were placed vertically i. e. across the tray. This and the next two objects were in hopeless condition. I saw them sufficiently complete to be measured, but the damp at night during the time that the tomb was open together with the effects of a sudden thunderstorm rapidly destroyed them though the tomb had been roofed over from the beginning.

28. Three tables like n° 25 and three trays like n° 27 follow these; apparently stand and tray formed a pair and were used together.

PLATE XVIII. — 30. The  signs are mostly black but with some streaks of yellow. The rest of the table was in the same colours but is much less well preserved. The black streaks on this and on some of the other stands have not been rigorously copied; when there was enough black to be sure which wood was intended I have drawn in the strokes somewhat freely.

31. This tray is in bad condition, but long, irregular streaks of black and yellow show that frame and inside alike were of the superior variegated wood.

32. There are traces of yellow on this table, but of the openwork only the red outlines are preserved.

33. The frame is of the ornamental wood, the inside plain yellow; no graining was visible.

34. To the south of these comes the third mast; this can be clearly seen to pass through the black and white woven patterns in the next register.

35. A box on legs. The legs are of the good wood, the framing of the box of the same, while the panel is yellow with graining of horizontal red lines.

36. Chair seen from the front. The seat is strengthened by a support of bent wood, the panel in the back is of yellow grained wood, its frame of ebony.

37. Above to the right is an object concerning which no doubt is possible. It is a bedstead or "angarib" seen from above. The frame is plain yellow; inside it is a narrow band of black, and black, too, is the whole mat or leather mattress.

A good many lines appear through the black but they are not intended: they are the boundaries of squares of matting, probably drawn in by mistake and painted over. The mat was held taut to the frame by thongs once painted yellow, though now little but the red outlines remain. These thongs are not drawn, as one would expect, passing right round the frame, but stop on

the inner side of the narrow black line. What is meant by this is shown by the actual beds found by Prof. Petrie this same winter at Tarkhan, for in the side bars of these bedsteads holes are drilled from the inner side and from below, so as to meet along the centre line; the thongs encircle thus but a quarter of the thickness of the wood.

Below the *angarib* are four chairs and stools.

The first, n° 38 is a chair; the legs are shown as viewed from the side, but the back is swung round through a right angle and shown in front view; the joints are made by leather thongs.

39. Next comes a stool with bent wood struts; it is made of light-coloured wood.

40. The third is a stool with a seat of black leather stretched by red leather thongs. The legs are shown as viewed from the side, the seat as from the top.

41. The last is another stool with an arch of bent wood below. It was probably coloured yellow but only the red outline remains.

PLATE XIX. — 42. We now come to two very puzzling objects — if indeed the two drawings do not, as is possible, represent two views of the same thing.

The upper one may be said to be formed of two overlapping rightangled triangles, from the larger of which the apex is cut off. The triangles were made of horizontal planks of yellow wood

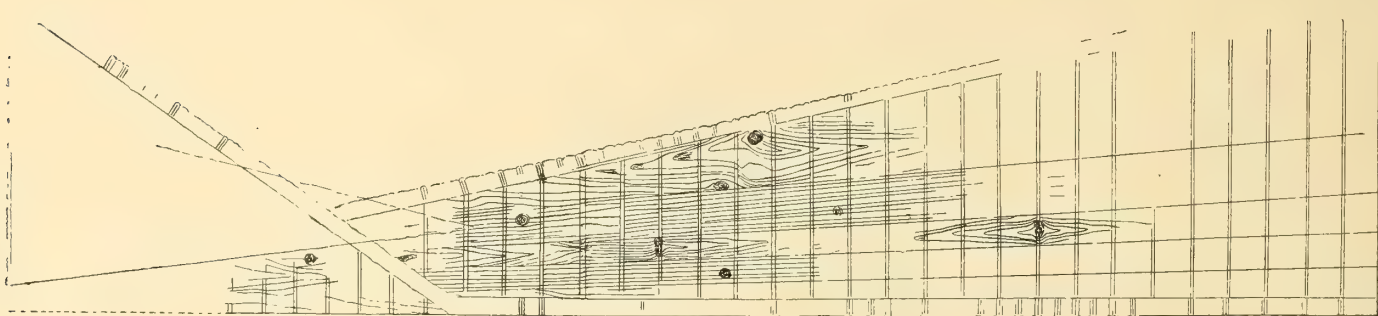


Fig. 10.

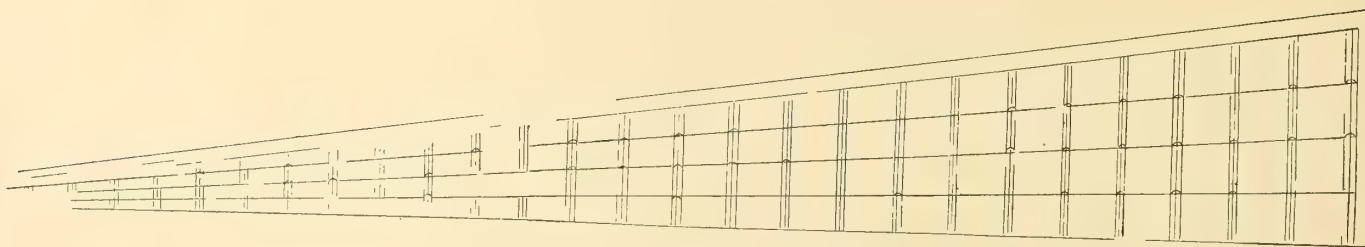


Fig. 11.

with red graining. Along the upper sides of both triangles runs a border, once of a green colour, which looks like a rod of wood turned in the lathe, or like a rope with ties at frequent intervals. From every alternate tie in this rope fall two vertical lines — in the smaller triangle to the base, in the larger to 0 m. 03 cent. short of it — where traces of green paint and



additional cross ties show that here too was a border like that on the top; it is, indeed, continuous with the hypotenuse of the small triangle.

The graining of the wood is well done; five planks can be distinguished in the larger division. The yellow tone of the planks and the red lines of graining are well preserved in the left half, but of the paint which must have existed on the vertical cross ties no speck remains. It was probably green, the worst colour for keeping in this tomb as in others.

The border existed also, it seems, on the vertical side of the small triangle. No colour remains, but the outline is composed of short curves, intended for the rope pattern but very hastily drawn. A little more of the graining might have been added on our figure further to the right, but only with some uncertainty; what is drawn has been drawn carefully.

It has been suggested that this was a palanquin; but with so much detail shown the artist could hardly have omitted the rings through the poles were thrust. It seems more likely that some kind of bed is intended.

43. In the lower drawing no colour except some of the yellow background remains and we see only the red lines of the original sketches and these are, on the upper and lower edge, crossed and confused by the lines of the background of matting. It is probable that the triangle had a green band as a frame as in the picture above it.

The design is divided into four equal, very elongated triangles and vertical strips, each composed of three lines, link at intervals the upper band with the base line. These are drawn right down to the base line, passing through the lower border which we suppose once to have existed, but which can no longer be seen. The spaces between these strips, 26 in number, are wider (55-56 mill.) than those in the upper drawing (43-45). Little arcs are drawn across the strips at the points where the long lines cut them. The left end of the drawing is destroyed.

The nature of the object depicted is anything but clear. It is perhaps a sloping bedstead like the one to the right (45), but with its sides filled in with planking.

44. This is another bedstead or *angarib*. The frame is yellow with a black inner edge; on the leather strapping hardly any colour remains. It was probably yellow, certainly not red.

The central part, the sheet of leather or cloth, is black. At the head-end the ties fastening on the legs are indicated and one leg is drawn. At the other end there are no legs and no ties and the body of the bed is drawn on a slope. This must have been a two-legged inclined rest; more examples of this form of furniture follow.

45. Below is another bed, also drawn on the slope but shown in section. The wood is yellow and a lot of vertical strokes that show through belong to the mat background. The leg is of a peculiar but rigid and practical form, supported by a strut of bent wood.

46. The next red mast is well preserved, and from it we see more clearly than in the other cases that all the masts passed through the second register. The limits of the chequer pattern too were here quite plain: there was, of course, originally, no blank space between this and pattern to the right of it, which might be filled in without fear of error all along the scene up to the next mast.

47. This is the top view of a wooden bed with projecting ends in the form of a flower at the head. Frame and panelling are of the same ordinary yellow wood elaborately grained. There seem to have been 13 cross planks, but 5 only, the breadth of which could be measured, are shown in the plate. There are no legs, but, as the bed slopes down to the left, a two-legged inclined support is doubtless intended.

48. Below is another wooden bed seen from the side. The side bar is a little thicker in the middle than at the ends, the single foot is of the same strutted form as in n° 45; side and strut are alike of grained wood.

PLATE XX. — 49 and 50. These two beds are almost identical. All the wood is of the ornamental kind, except the panel at the foot which is of the ordinary yellow grained in red. But what does the extra leg mean? Probably it is the inner leg at the foot end: the footboard was brought round so as to be well seen in accordance with Egyptian ideas, and then a support was felt to be needed at its inner corner. A leg with a bent wood support should really have been shown, but this would have upset the drawing, so a plain leg of slight dimensions served to indicate that the inner corner of the footboard had some support, and with a little goodwill the spectator would understand what form of leg was really meant.

51 and 52. But this was not felt to be entirely satisfactory and in the next pair of beds (for the execution of the work proceeded from left to right, as the correction in n° 18 shews) the artist's sense of symmetry led him still further from his facts and he added another plain leg to balance the first, neither having any real existence in the object he was portraying. This at least seems a simple explanation of his varied attempts to make a bed look natural. It is interesting to find that he could, at this early time, allow himself so much latitude. In 51 the sidepoles and the legs are of ebony while the panel is yellow; in 52 the employment of the two woods is reversed; the panel is ebony and the sidepoles of common wood.

53. Next comes another of the red masts and beyond it the series of small trays begins again.

54. In this the final picture has largely fallen away and disclosed below the red outlines of an earlier design which had been rejected or at least modified and so cannot be used to supplement what is missing. Of the later and accepted design we can see, first, a frame with two straight sides and two curved; the straight lines are black and yellow and the curved ones almost certainly the same, though the paint has fallen; the curved ends are a correction. The inside is divided into three horizontal bands on the upper and lower of which is painted a lozenge pattern which looks like a strapping of cloth or leather. These red bands, unlike almost everything else on the wall, have no carefully drawn outlines but were painted in freehand with a broad brush.

In the middle band I see no trace of red straps, but two long *kherp* signs are left in red line; they stretch out, however, beyond the limits of the frame and the ends of them are visible in n° 56; probably then they belong to the earlier picture.




55. Below this is another square frame shown again in colour on plate XIV. Frame and cross-bar are alike of ebony, the floor of the tray of yellow wood grained in red; the lines of graining are continuous in the two halves, so we can be sure that the cross-bar and the frame were both in relief. The inverted 'U's, their bases and the two  signs show only plain yellow without graining; the ties between the *dad* signs are red, but what they represent I do not know. In the lower half the greater part is also painted red. This might be merely for a lining, but as the colour does not quite cover the space it more probably denotes some removable object, such as a seat or cushion.



PLATE XXI. — 56. This tray is similar to n° 54, its neighbour. It has curved ends and in this case the whole frame is clearly of ornamental wood. The two bands of red cross-ties are wider and meet in the middle. What the bundles contained cannot be seen. At the left end are the heads of two *kherp* sceptres, the handles of which stretch far outside the frame: they are remains of an earlier design, to which must also be attributed three or four other lines, one of them forming a small vertical ellipse which can be seen below the red strapping. (This is not reproduced.)


57. The design below this is exceptionally intelligible and also well preserved. It is reproduced in colour on plate XIV. Three headrests of different forms, one of them with a double pillar, stand on a tray of the ordinary wood; two of them are of ebony, one of white wood or stone with ebony base. The frame and its cross-bars are of the same material. It is curious to see that these three forms were in use at the same time. Evidently our attempts to date headrests by small differences of shape are not very promising.

58. This, the third of the round-ended trays, is in very bad condition. Nearly all the colour has fallen, but the little left shows that the floor was black and yellow and the frame yellow. The elliptical object with some projection on the left side (shell-shaped) belongs perhaps to the later and accepted design as it is not painted, while the black and yellow background comes up closely to its edge. The ellipse on the left may go with it but the two basins in the register above had evidently been suppressed, for one of them is cut through by the frame of the tray and patches of the black and yellow background are still visible over it. The other red lines that are not merely setting-out lines or lines of division appear to depict the heads of large maces.

59. Below is an oblong frame or tray divided into several sections. The frame is black and yellow, the background of the subdivisions yellow, except those of the large central space below and the smaller one to its right which are red; in the larger of these there are two shades of colour, brick-red in the middle and a darker red on the edges. The names written in the upper six divisions are not very distinct but appear to be those of eyepaints. On the left is a vertical vase, coloured yellow with red outlines; below it are three kohl-sticks(?) with handles in the form of hieroglyphs and on the right, on a red background, are two spirals, now white and one of them barely visible.

60. This also is very indistinct. Six long yellow bars, narrow and wide alternately, lie on the tray. On one of them red lines like those on the axe-handles seem to show that objects of wood are intended. This one tapers slowly from the right then widens at the left end like the bowl of a spoon or the head of a mace. Probably all the objects are similar, but the picture is in too bad condition to be understood. A crack, the only one in this long wall, passes through it; much of the colour, too, has fallen and disclosed parts of an earlier design — two ellipses and some vertical lines. The ellipses are not quite regular, they have a projection on the left side and are probably meant for shells.

61. This was evidently a little like 59, but is in worse condition; the frame and cross-bars are coloured as usual. In the middle band the left and central divisions are painted with a zigzag of red and a yellow strip above and below. The zigzag had been drawn in yellow by the first draughtsman and his lines show in some places beyond the red; in the third division, that to the right, the zigzag is in yellow only, and has been covered over by a uniform wash of red. In each division of the upper bands was a word in black hieroglyphs :  is the only one now visible while in all three divisions below was the same word  (faience?).

62. Is much better preserved, except at the right end, where part of two  signs in outline evidently belong to the earlier scheme and were not intended to be seen. To the left of them are two vertical lines and only the part beyond these belongs to the final picture. The ebony

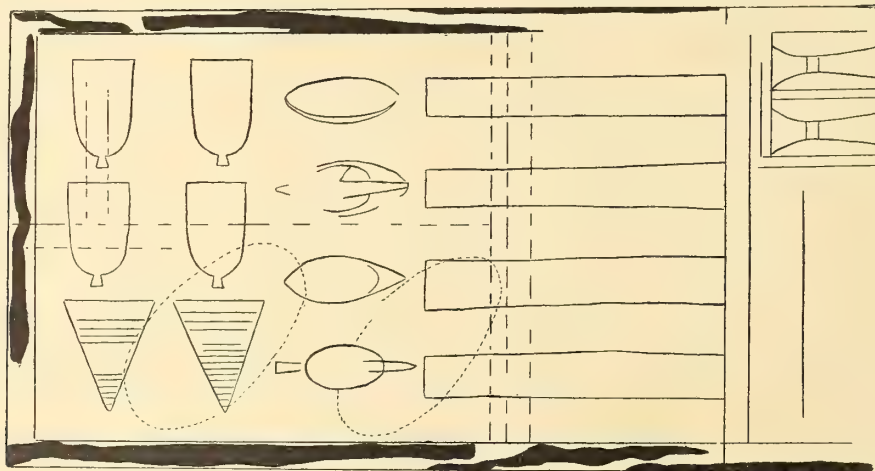


Fig. 12.

frame and the red background are as usual. On the right are four broad horizontal bands of yellow on one of which remain traces of long red lines, probably denoting wood. Opposite the end of each of these bands is a yellow ellipse pierced by some dagger-shaped object : here again much detail may have fallen away, and one ellipse in red line can be seen drawn 3 or 4 mill. outside the yellow one, and showing faintly under the red background. The left side is much clearer. Above are four yellow draughtmen drawn upside down, and below them two inverted pyramids also in yellow, streaked with parallel horizontal red lines. They look like spinning tops and the objects in the middle like spools of string for spinning them, but it is hard to



suppose that so dignified a person as Hesy would need such amusements. Here again two ellipses from the original drawing show up faintly.

63. We turn again to the lower row to a tray of four divisions three of which have inscriptions in black hieroglyphs on yellow (cf. fig. 13). In the fourth is a zigzag band of red on a yellow ground. Below, to the right, are two vases, once yellow, on a red background; the left half is obscure, the greater part being covered by streaks of black and yellow, but under this appears a drawing in red line which seems intended for two pincases with brushes in them.



Fig. 13.

64. In this the remainder of the two signs, continued from n° 59, the basin to the right and the vertical division line, all belong to the earlier project, while of the final design nothing remains but a few patches of the red background and, low down, a white spiral.

65. This tray with the pairs of daggers(?) in cases is one of the best preserved of all. The floors of the four upper divisions are of grained wood, the frame of ebony. Of the colour of the



Fig. 14.

handles no trace remains : all that can now be seen is the yellow line of the first rapid sketch and the careful red outline of the second. The first case on the left is yellow, the second shows traces of black in patches, on the third and fourth no colour remains except on the yellow zigzag and the red band near the handles; these are the same in all four. In the wide band below the daggers the background is red, on the left is a large black oblong the right end of which is destroyed; in the middle part nothing remains but a faint tint of yellow and in the last fourth on the right the outlines of four pairs of tweezers (cf. pl. XXI) are faintly visible in yellow on the red.

66. This is nearly obliterated. High up are two cigar-shaped objects, the lower retaining some yellow colour, to the right is a small bowl. The greater part is hopeless; the colour has been lost and from below appear lines used to set out an earlier drawing, — two spirals, part of a vertical vase and an object of the shape of an inverted U, somewhat similar to the frames above the *dad* signs in n° 55.

67. A row of trowels or some such tools, probably in cases. The handles were of ebony, the sheaths probably yellow, the background red, but very little colour is left. In the lower division

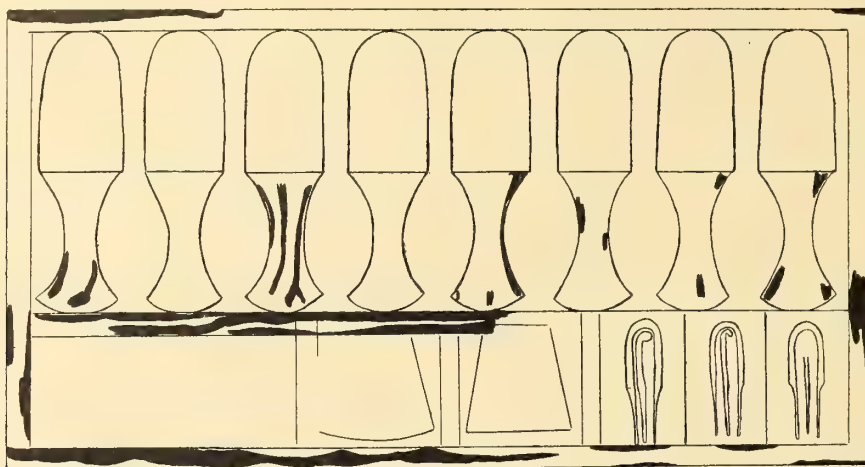


Fig. 15.

the left side is yellow with wood graining, now faint, and on the right side through the paint appear the outlines of two vases and three pairs of tweezers and bodkins. All these appear to belong to the first draft.

68. Here I can see nothing but the frame and the red lining, some setting out lines and a pair of illegible hieroglyphs scrawled on the wall before the painting was begun.

69. Part of this recalls n° 60. In the upper division are coils of cord, in the lower horizontal

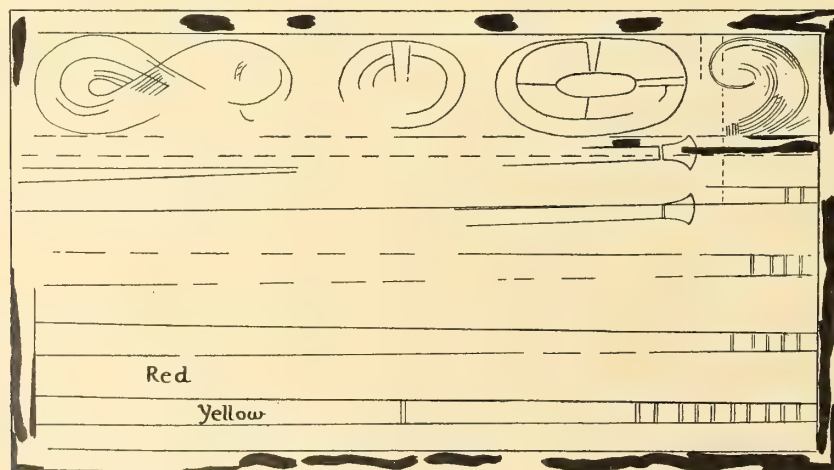


Fig. 16.

bands of light colour tapering from left to right and crossed by pairs of vertical lines one



centimetre apart. There are no visible ends to these bars which seem to butt against the frame. The flower-head ends, about 0 m. 06 cent. from the right, belong to an earlier design.

The black and yellow frame and red background are as usual.

70. This is an oblong frame placed upright: the position is exceptional, as also is the fact that the top and bottom bars project; they are yellow while the two long sides are yellow and black, and the background in the upper half is of the same colours, while that in the lower is red. Perhaps this is not a flat tray like the rest, but an ebony box with a red lining — or a tray with a cover. On the large vase there remain vague patches of black from its original colour.

Numerous horizontal red lines under the rim simulated a cord. No colour remains on the smaller vase; the spatula or pestle above it is yellow, round at one end, square at the other.

71. This is again an oblong placed vertically, and again the top and bottom bars have projecting ends; they are, in this case, of ebony, the long ones of common wood. The upper half of the lining is yellow, the lower red. On the two vases no colour remains; there is a patch on the spoon. The drawing of the hand half way up the stem was really very good, but now



Fig. 17.

appears confused because the thumb from an earlier sketch, once painted over and out of sight, has reappeared. The sharpness and evenness of the lines in the fingers is remarkable; there is no trace of a blob at the end of a line, nor of a thickening where the pen was redipped; they look as if drawn, and well drawn, with a mathematical pen.

An ivory spoon, very similar to this was found once at Ballas (PETRIE, *Naqada*, pl. XLIII).

72. To the right of this comes another of the masts of the tent.

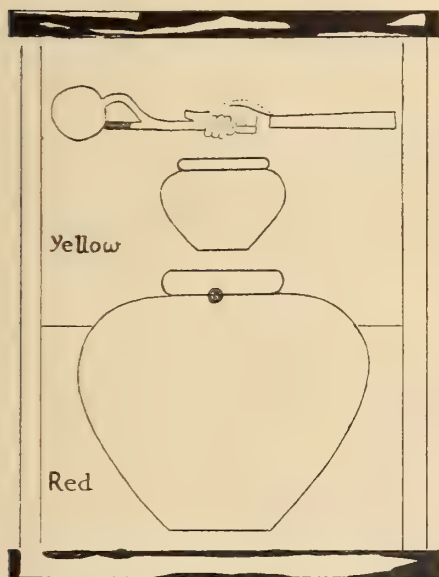


Fig. 18.

74. Next comes a singular drawing in red lines, looking like the model of a fenced enclosure: no colour remains.

75. The last drawing on the upper line is incomplete. Little colour is left; the stems of the

PLATE XXII. — 73. On the first tray beyond the mast are laid eight wands (?) each shaped like a column with its capital; they are yellow in colour and adorned at 13 millimetre intervals with pairs of horizontal red lines.




two long column-like rods are black while the ground behind one of them is red; the first circle is coloured differently on the two sides of its vertical diameter, being light green to the left and of a darker shade, less well preserved, on the right. In the second circle the narrow outer crescent is also green, on the next one I see no colour at all. This again is a puzzle. Probably the fragment on plate XV, 1, came near this.

76. In the lower row are four objects of a new kind, boxes or deep trays, each provided with a round black handle and with a black bar along the top. Inside the first are two stone bowls; on one of them only a few black streaks remain, but on the other the structure of the stone is carefully painted; a breccia of rounded white pebbles in a black matrix seems intended. The peculiar way of indicating the mouth of the vase is not very uncommon.

77. In n° 77, the same design is repeated but no colour is left.

78. In this is a table, probably of alabaster, as a trace of yellow colour remains. The next, n° 79, is in outline only.

80. Is incomplete. It contained a basin and ewer, painted of a dark colour, some straight lines and another vase or basin. From here to the end of the long wall there is no plaster left, except where, north of the door, there is a skew panel, set back a little to prevent it from being touched by people entering.

Door. — In all this little colour is left; my drawing was made from the faint traces of red outlines fixed by a prompt application of varnish. The lowest range of vases are yellow, the  red, the  below is black, the  to the left red.

In the gateway and to the south of it all decoration has fallen away.

PLATE XXIII. — The patterns of tent cloth from the middle register. The first recurs on both sides of each mast while each of the others occupies one of the spaces between a pair of masts. The last one is too incomplete to be fully drawn. The three horizontal borders which bound the patterns are of green with yellow edges.

PLATE XXIV. — 1. The niche at the north end of the outer corridor. On the left are the supports of the temporary roof. In the background, in front of the crouching man, is the north niche of the mastaba. The pyramids of Abusir appear in the distance.

2. The *serdab* (?), a room situated to the left of the entrance to the long decorated passage. In the floor is a stone which seems to have served as a base for statues. The inner half of the room, enclosing the statues, was shut off by a cross wall the traces of which remain on the two sides.

In the doorway is seen the heavy wooden hasp with which the door was fastened. A rope end of palm fibre lay below it. The two pyramids are Teta and the Step Pyramid.

3. One of the two holes broken through the mass of brickwork by earlier diggers and disclosing the built-in niches. This view shows the north end of the hidden passage.



4. View of the shaft from the south, showing the method of bringing up the soil. On left and right two straight joints will be noted; these mark the face of the wall which surrounded the stair and shaft.

PLATE XXV. — Three views underground, all on the highest and most important level. The first shows the entrance chamber when partially cleared, with in the background the blocked door into the burial chamber broken through by the earliest robbers.

The second shows the passage to the east of this room, and is taken from the north end. The door of the burial chamber that was found open is at the far end. On the left is seen the opening to one of the magazines, once closed by a brick wall and plastered over, but long since broken open and very thoroughly cleared.

The third shows part of the burial chamber itself, and was taken from the door just mentioned. In front is the blocked door seen from the other side in the picture above, on the right is a bench in steps of well-hewn stone, on the left the end of a roughly built wall which once divided the chamber into two.

On the roof can be seen the tracks of the chisels with which the surface was dressed.

PLATE XXVI. — The best preserved of the stone vases, in alabaster, diorite and gabbro. That some of them are of considerable size will be seen by comparing them with the 30 centimetre scale below. The fragments from which they were reconstructed were, in some cases, found scattered widely through the tomb, often in several different chambers.

PLATE XXVII. — The typical shapes of stone vases : below them the potsherds found.

STONE VASES. — The fragments of stone vases were collected, washed and marked with the letter denoting the chamber in which they were found. Many hours were then spent in fitting them together; some were made up of fragments scattered through four different rooms. Afterwards a list was drawn up of all the vases the forms of which could be recognised. From this the following summary has been compiled :

SHAPE	NUMBER FOUND
1. Alabaster milk bowls . . . . .	3 examples
2. Porphyry or gabbro, all heavy . . . . .	10 "
3. Alabaster . . . . .	1 "
4 and 8. Diorite and porphyry bowls . . . . .	14 "
6. Tables of alabaster . . . . .	13 "
" of porphyry . . . . .	3 "
7. Alabaster bowls with edge not incurved . . . . .	5 "
10 and 13. Vertical vases . . . . .	21 "
11. Alabaster. Net in relief . . . . .	1 "
12. Alabaster . . . . .	10 "
19. Fragment of one alabaster bowl . . . . .	1 "
Elliptical dish shown in pl. XXVI (centre, low.) . . . . .	1 "

There were certainly many more vases than this originally; we found great quantities of small fragments with which nothing could be done. The vases are generally large and ill-finished, a coarsely crystalline alabaster being much used. Some of the hard stone vessels were however well made.

POTTERY. — There were no complete vases; the shapes are drawn from sherds :

14. Neck of a very large vase of strong ware, drab outside, light red in, unique here.
16. Mouth of a large vase of light red ware, brown in the inside of the fabric, handmade, well baked, probably the ordinary III<sup>rd</sup> Dynasty egg-shaped vase. The base of such a vase was also found.
18. Bowl of red-washed ware.
19. Milk bowl. Edge not so sharp as in IV<sup>th</sup> Dynasty.
20. Base of a vase of red ware washed with haematite.
21. Several fragments of coarse brown dishes with white stains of plaster inside. This form is easily recognised and is characteristic of the period, in stone as well as in earthenware.
22. A large bowl of upright shape. The broken edge shews a thin red outer surface, with a wash of haematite over it, but the inside of the ware black.

PLATE XXVIII. — On this plate are collected sketches of nearly all the bits of bone and other materials, except potsherds and fragments of stone vessels, which had been left in the filling of the shaft and chambers.

They are on a scale of 2/3. Nos 1-10 and 12-17 are of bone, 18 and 19 of flint, 20 of green faience, 21 of carnelian, 22 a dark steatite, 23 mud, 24 good faience, 25 and 11 of faience and 26 of copper.

3. Is a tongue-shaped part of some tool : most of the other pieces of bone are pins or bits of inlay; their convex outer face is that of the natural bone.

9. Is a dagger handle made from a long bone of an animal, polished and looking much like ivory. It is hollow all through; the hole at the blade end is the natural cavity of the bone but at the other end this has been enlarged.

On the side of the handle the inscription n° 8, was engraved; the signs on the left are very lightly scribed or perhaps have been worn down by use.

10. Is probably inlay from a statuette.

11. Is part of an oblong plaque of green faience with a sunk circle on the top. Inside the circle are black stains; some other object had been attached to it.

12. Is a much decayed bit of bone with an incomplete name and title, apparently not those of Hesy.

13. A slip from inlay.

14. Part of a disc of bone, slightly concave on the upper surface and hollowed round the rim. Both these surfaces are polished and darkened with exposure. The flat under side with its



projecting boss is rougher and lighter coloured. It was perhaps an ornament applied to wood but was certainly not a lid.

15. Is a similar disc but the concavity on the upper face is less marked and there is no tang below. A strip of gold foil was found partly adhering to the edge. It had overlapped the edge, for round the rim there is a narrow border of white while the rest of the disc is brown and must have been exposed to the air. The concave edge of the disc and the under face are both white. It looks exactly like a piece for draughts, for the modern game, but must go with the last number.

16. Is surely a piece of inlay.

17. Is from a bone disc like 14, but in worse condition.

18 and 19. Are the only two flints — part of a knife and a beaked flake.


20. Is part of a thick circular plaque of faience, much decayed, probably for inlaying.

21. A half moon of carnelian : one of its faces is smooth but dull, the other face and the edges are polished. This would indicate that it is not a piece of inlay, but rather a pawn from some game or a model tool. Similar objects have occurred in foundation deposits.

22. Another half moon of stone, but its upper surface is lenticular and well polished, the lower, and most of the edge, dull. The stone is dark coloured with red streaks, not very hard, and is probably a marble or steatite. This may well be from inlay.

23. Two fragments from a seal of black clay, just enough to make sure of the name Neterkhet. On the back of the seal is the print of a cord. Another fragment bore a part of the same inscription.

24. A girdle-tie sign of yellow faience pierced longitudinally. Part of another, blue in colour, was found. As the tomb had been entered once and probably twice, it is possible, though very unlikely, that these beads are not of the III<sup>rd</sup> Dynasty.

25. Part of an oblong tile of light green faience, pierced at the top by an L-shaped hole bored from the end to the face. The sign —— had been made in the wet paste before firing. Four fragments of such tiles (beside n° 11) were found. They are well made, square and sharp at the edges, the glaze is very thin, but in the one least decayed is of a good bright green colour. On two of them are illegible traces of hieroglyphs scratched before the firing. Whatever their function may have been, they were not pieces of inlay but were put in the tomb as detached objects, perhaps as labels on jars or on bundles of offerings.

26. The only complete object of copper found. It is one of the ordinary model knives made for funeral purposes. There were a few more scraps of metal, one of them from a small basin, but nothing that had a shape that could be drawn. Some scraps were sent to M<sup>r</sup> A. Lucas for analysis. He made a chemical analysis and in addition asked M<sup>r</sup> Garland to make for us a microscopical examination. I am indebted to these two gentlemen for the two reports printed below.

«The sample submitted consists almost entirely of copper oxide which must be largely present in the cupric and not in the cuprous condition.

«The composition of the original metal must have been as under, namely :

Copper.....	99,62 0/0
Tin .....	0,20
Iron.....	0,18
Total.....	100,00

«The metal therefore was copper and not bronze».

Signed : A. LUCAS.

«I have microscopically examined the fragment of metal and am sorry to say it is entirely oxidised, presumably chiefly to amorphous Cuprous Oxide. It has, therefore, no metallic attributes now, and possesses no microstructure to give us information concerning its mode of manufacture or the state of purity of the metal, etc., although there are slight indications that it is impure copper and not bronze.

«I would like to say, however, that in the course of my experience in examining Egyptian antique copper and bronze articles from a metallographical standpoint, it is only these very early specimens which I have found to be completely oxidised. In the case of articles of later dates, such as the XVIII<sup>th</sup> Dynasty and the Saitic Empire, I have invariably found that a core or substratum of metal — it may be microscopic in extent and not perceptible to the naked eye — always exists. This applies to specimens equally as thin as the fragment now under report, and without qualification as to the condition or place of inhumation. I mention this because there is just a chance that this method of examination may be of use in the case of some copper or bronze antique the age of which may be in dispute or doubt.

«I am not aware whether this fragment is of recent discovery, but I beg to point out that it appears to have been broken off the plate (or whatever article it may have been originally) a considerable time ago. The fracture shows, however, that this must have taken place some thousands of years after the article was made, because the metal must have been almost completely oxidised to give such a fracture. This fact I mention because possibly the tomb may have been desecrated at some time and the information may help to fix a period for the occurrence, but of course a lot depends upon the treatment the fragment has received since it was discovered».

Signed : HERBERT GARLAND.

Mr Garland's observation affords a neat proof of the repeated violation of the tomb; from other evidence we had come to the same conclusion.

PLATE XXIX. — For completeness' sake the five panels of Hesy from the Cairo Museum are published again. I am indebted to E. Brugsch Pasha for the photographs in these last four plates. The numbers of the panels in Borchardt's Catalogue are 1426 and 1427 for the two on this plate, 1429 and 1430 for the next and 1426 for pl. XXXI. This last is shown again on a larger scale in pl. XXXII.



## INDEX.

Angarib, 7.  
Batter, 5.  
Beds, 7, 28, 29.  
Bones, 12.  
Burial chamber, 12.  
Copper, 40.  
Corn-measures, 7.  
Craig, 2.  
Dagger, 33, 38.  
Door-fastening, 9, 16.  
Faience, 39.  
Games, 6.  
Headrests, 57.

Loom (?), 24.  
Mat, 6.  
Measures, 23.  
Meir, 9.  
Metal tools, 12.  
Metal caps, 17.  
Mosquito-nets, 26.  
Neterkhet, 3, 12.  
Panel, 4, 5.  
Pencases, 33.  
Pens, 6.  
Pepyankh, 9.  
Plaster, 5.

Portcullis, 3.  
Rashepses, 9.  
Razors (?), 8.  
Roof, 5.  
Rugs, 8.  
*Serdab*, 10.  
Serpent game, 19, 20.  
Strikers, 17, 26.  
Tent, 8, 9.  
Tool-tray, 21.  
Varnish, 11.  
Vertical joints, 11.



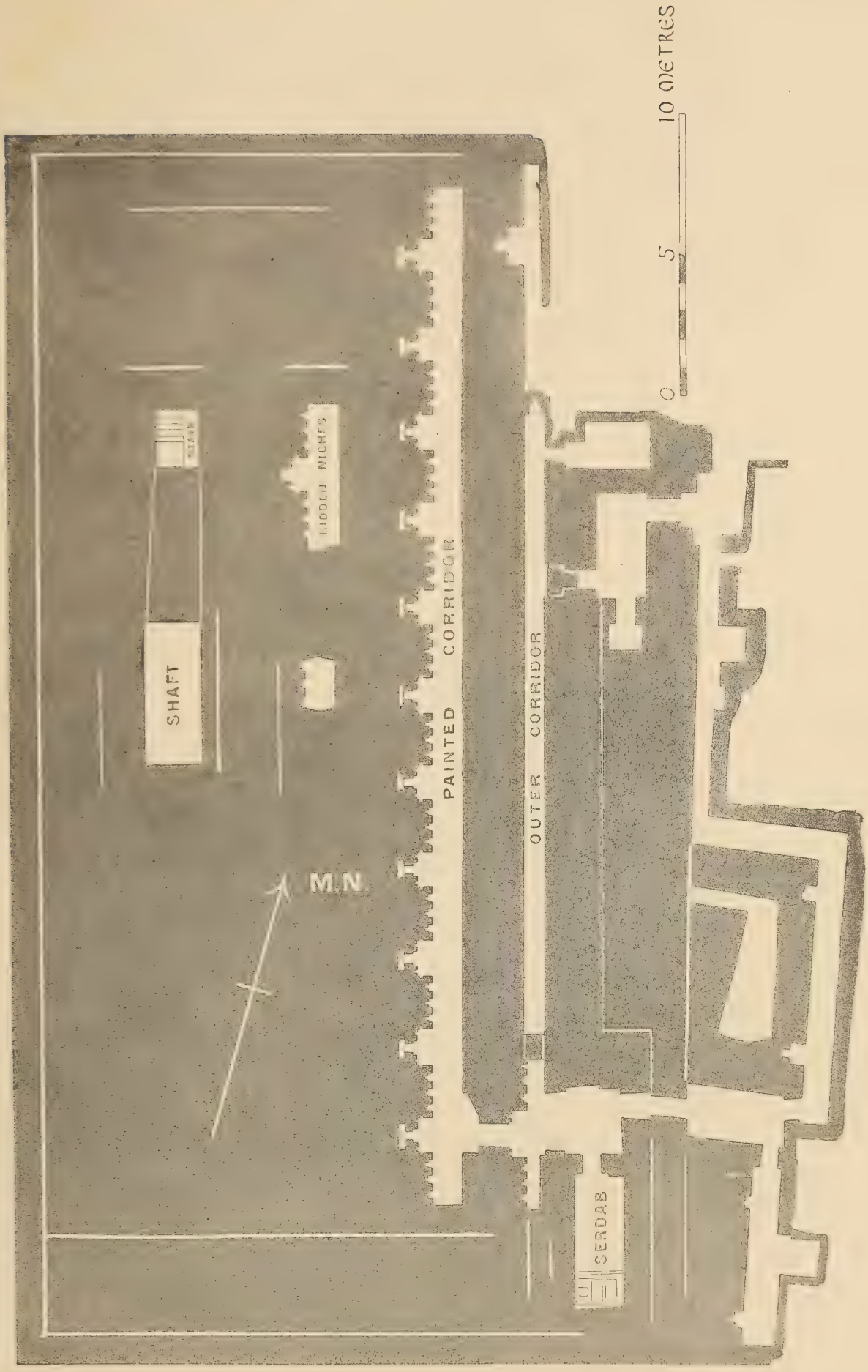


## LIST OF PLATES.

- |  |  |
|--|--|
| <p>PLATE I. . . . . Plan.</p> <p>II. . . . . Section.</p> <p>III. . . . . General view (photograph).</p> <p>IV. . . . . Corridor, Niches (photograph).</p> <p>V. . . . . Panel in position (line drawing).</p> <p>VI. . . . . The painted wall, general view (photograph).</p> <p>VII. . . . . Lion game, crocodile, new panel (photograph).</p> <p>VIII. . . . . } Patterns in niches (coloured).</p> <p>IX. . . . . }</p> <p>X. . . . . Magazines of oils (coloured).</p> <p>XI. . . . . The three games (coloured).</p> <p>XII. . . . . Loom (?) (coloured).</p> <p>XIII. . . . . Corn-measures (coloured).</p> | <p>PLATE XIV. . . . . Three headrests, another tray (coloured).</p> <p>XV. . . . . Fragments of wall decoration (photograph from drawings).</p> <p>XVI. . . . . } Designs on the east wall (line).</p> <p>XXII. . . . . }</p> <p>XXIII. . . . . Patterns of the tent roof (line).</p> <p>XXIV. . . . . Niche in outer corridor, <i>serdab</i>, hidden niches, the main shaft (photograph).</p> <p>XXV. . . . . Underground chambers (photogr.).</p> <p>XXVI. . . . . Stone vases (photograph).</p> <p>XXVII. . . . . Stone vases. Pottery (line).</p> <p>XXVIII. . . . . Small objects (line).</p> <p>XXIX. . . . . } The panels in the Museum (photogr.).</p> <p>XXXII. . . . . }</p> |
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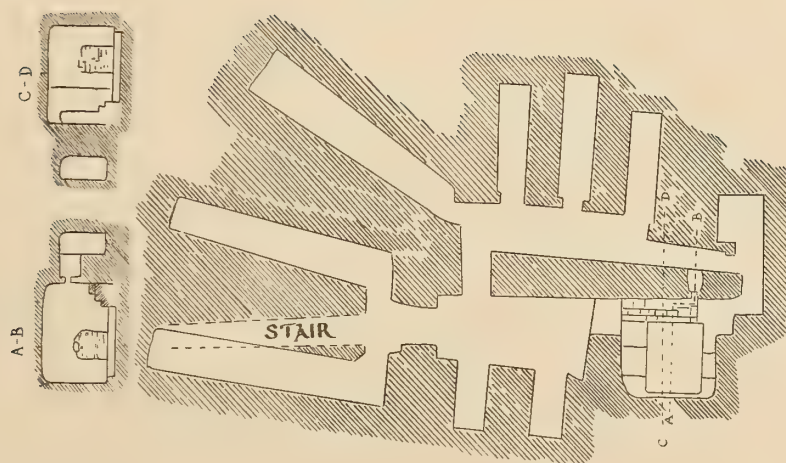
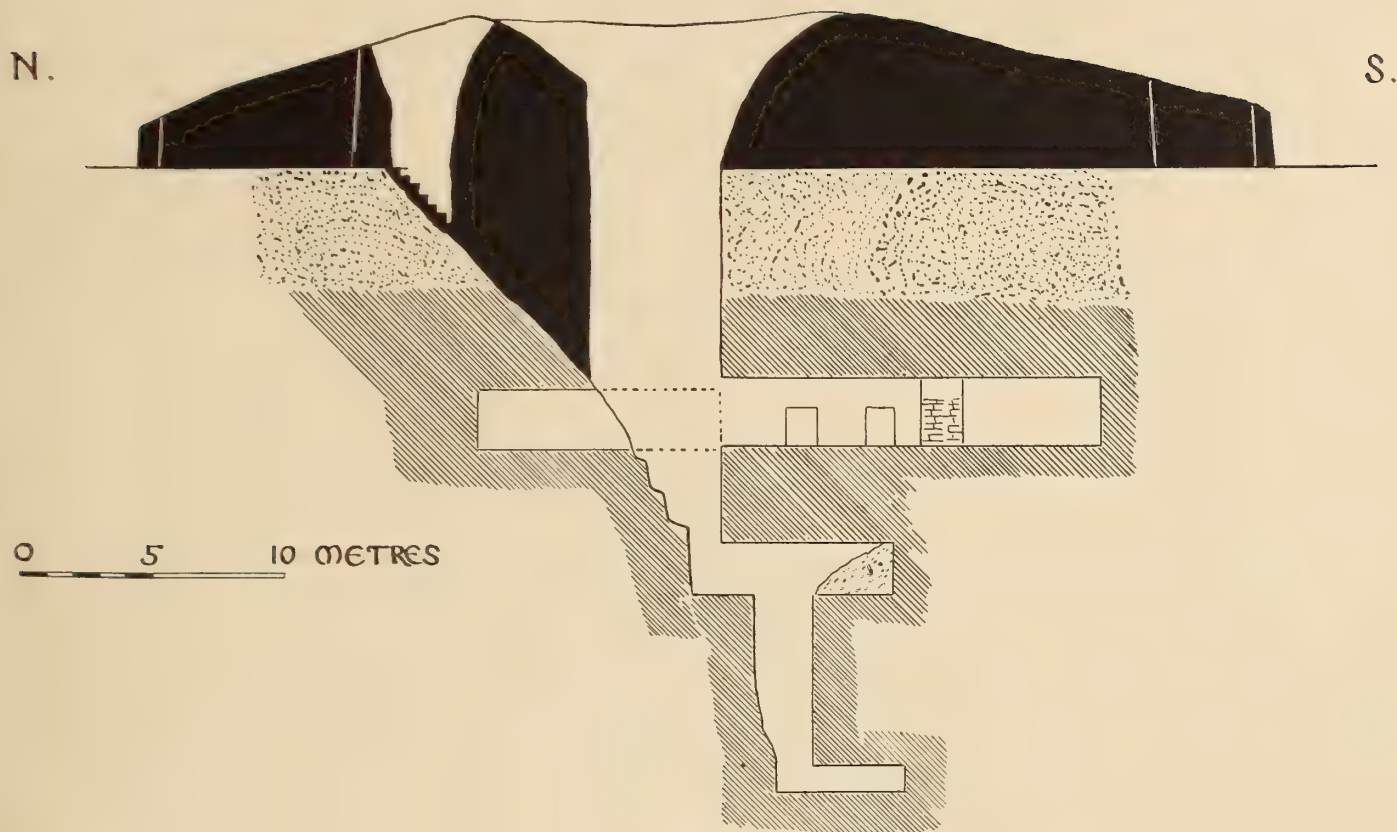




PLAN OF TOMB OF HESY.













VIEW OF TOMB FROM SOUTH.







I. CORRIDOR FROM SOUTH.



2. DÉTAIL OF NICHE.



3. TOMB SEEN FROM SOUTH.



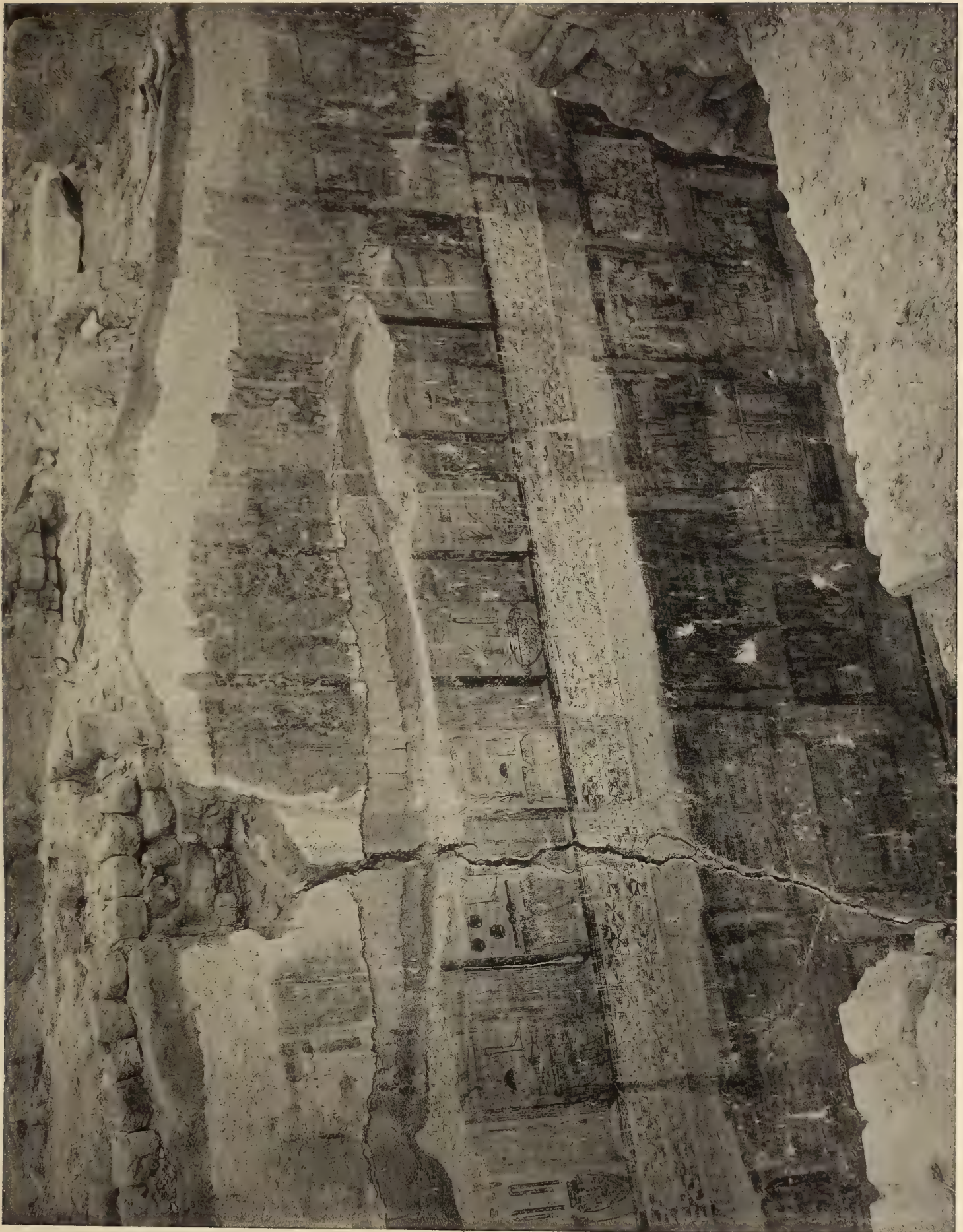




A WOODEN PANEL IN POSITION.  
From a pencil drawing by F. H. Darke.



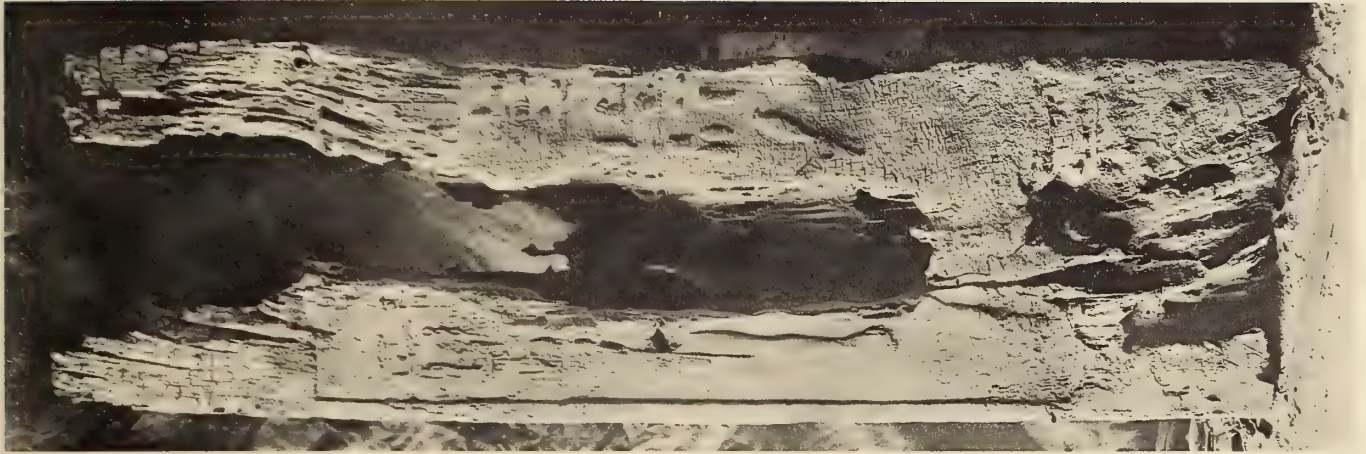




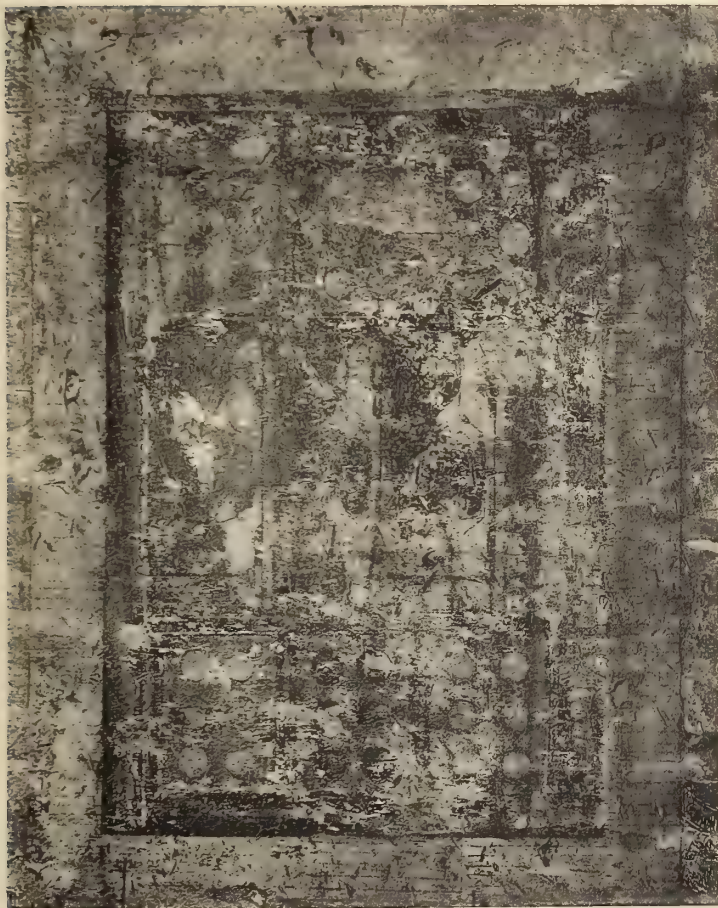
EAST WALL OF CORRIDOR.







3. NEW PANEL.



1. LION GAME.



2. FROM FRIEZE IN OUTER PASSAGE.

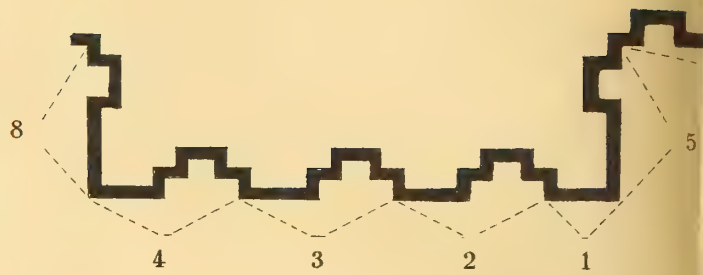








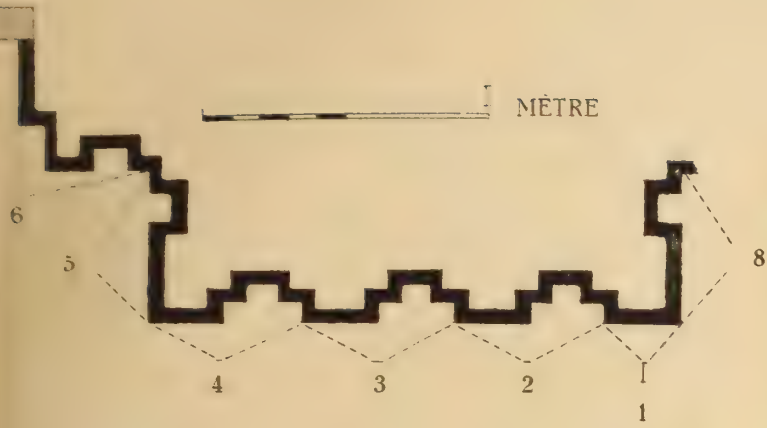
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NEL



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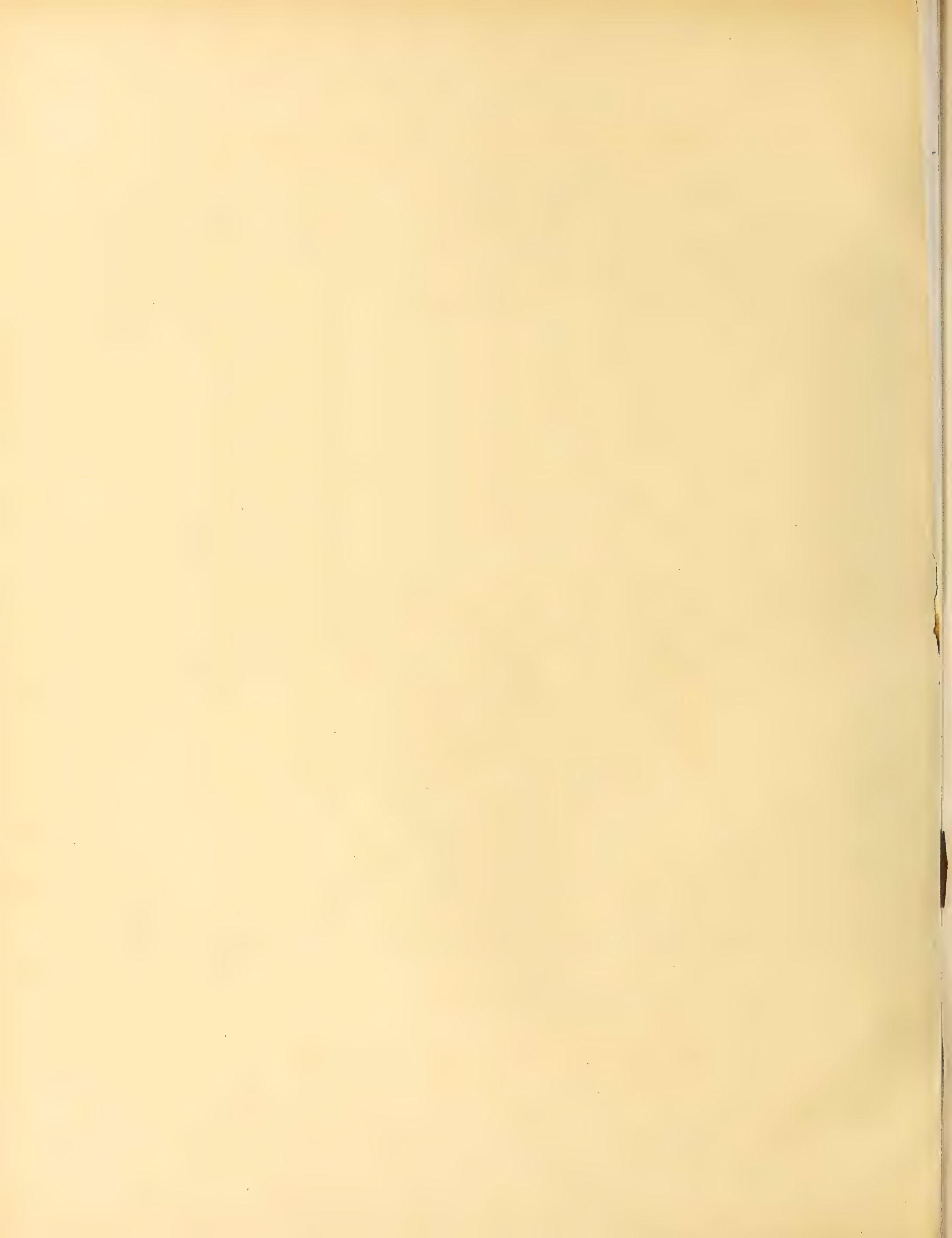
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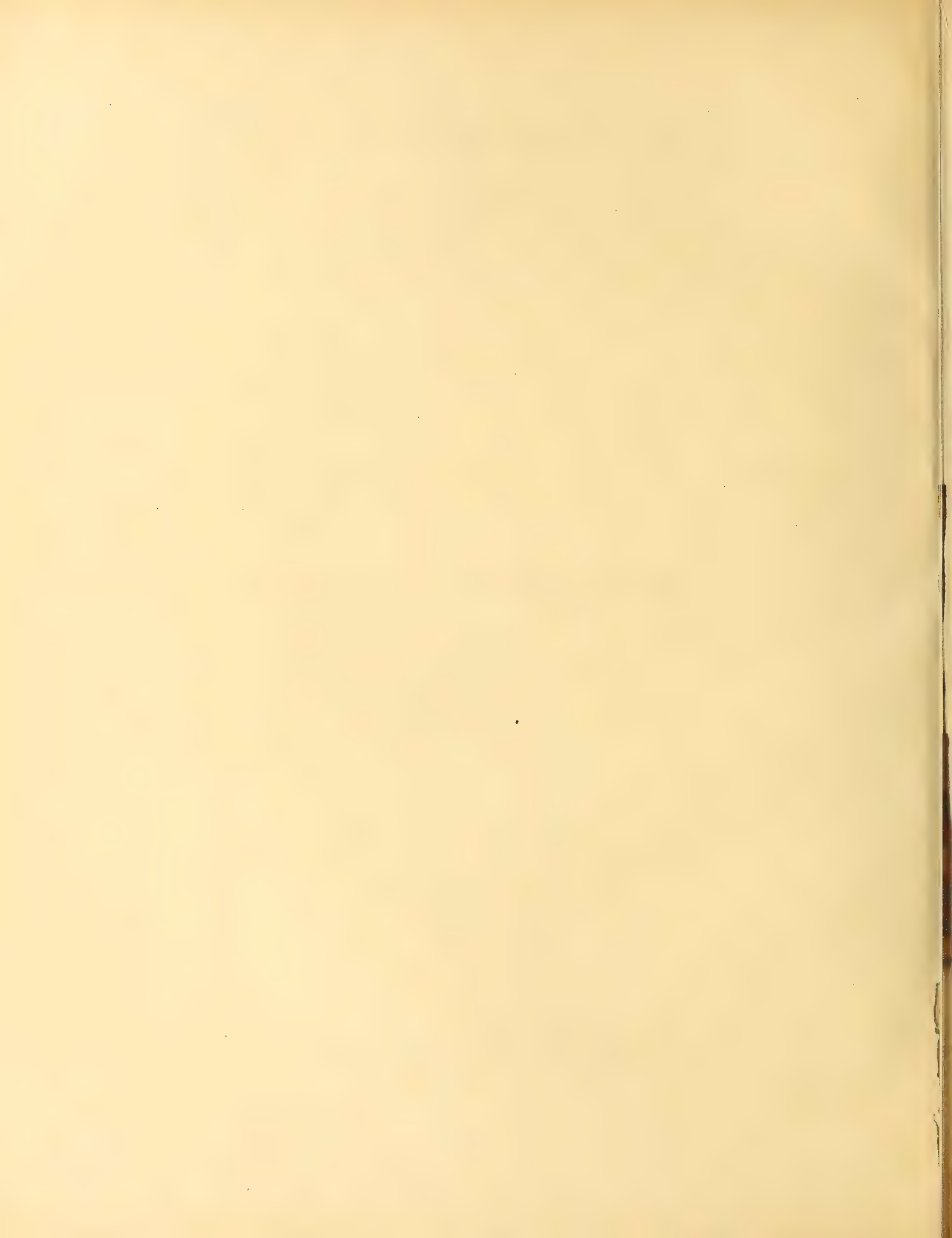








MAGAZINES OF OILS. UPPER REGISTER.



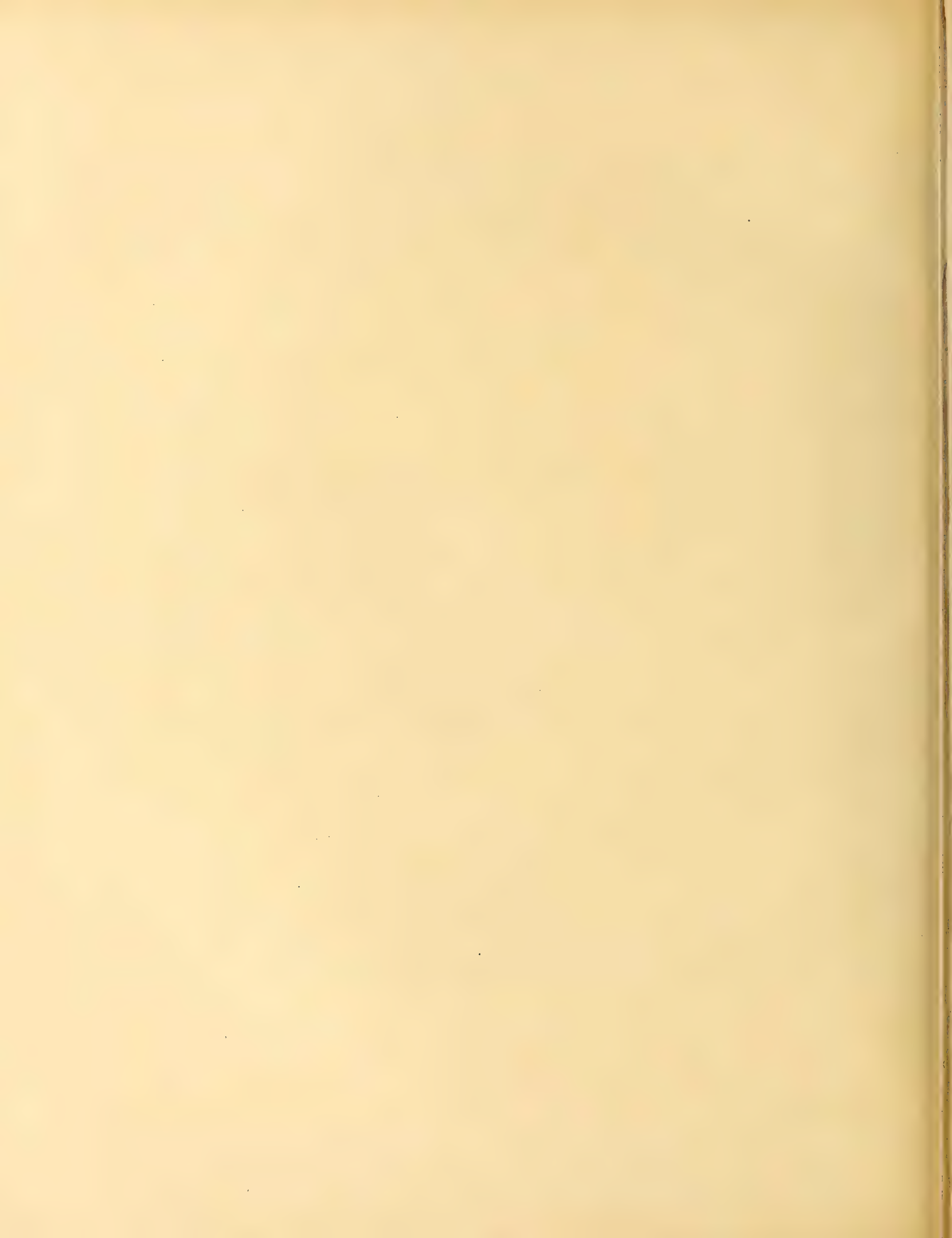




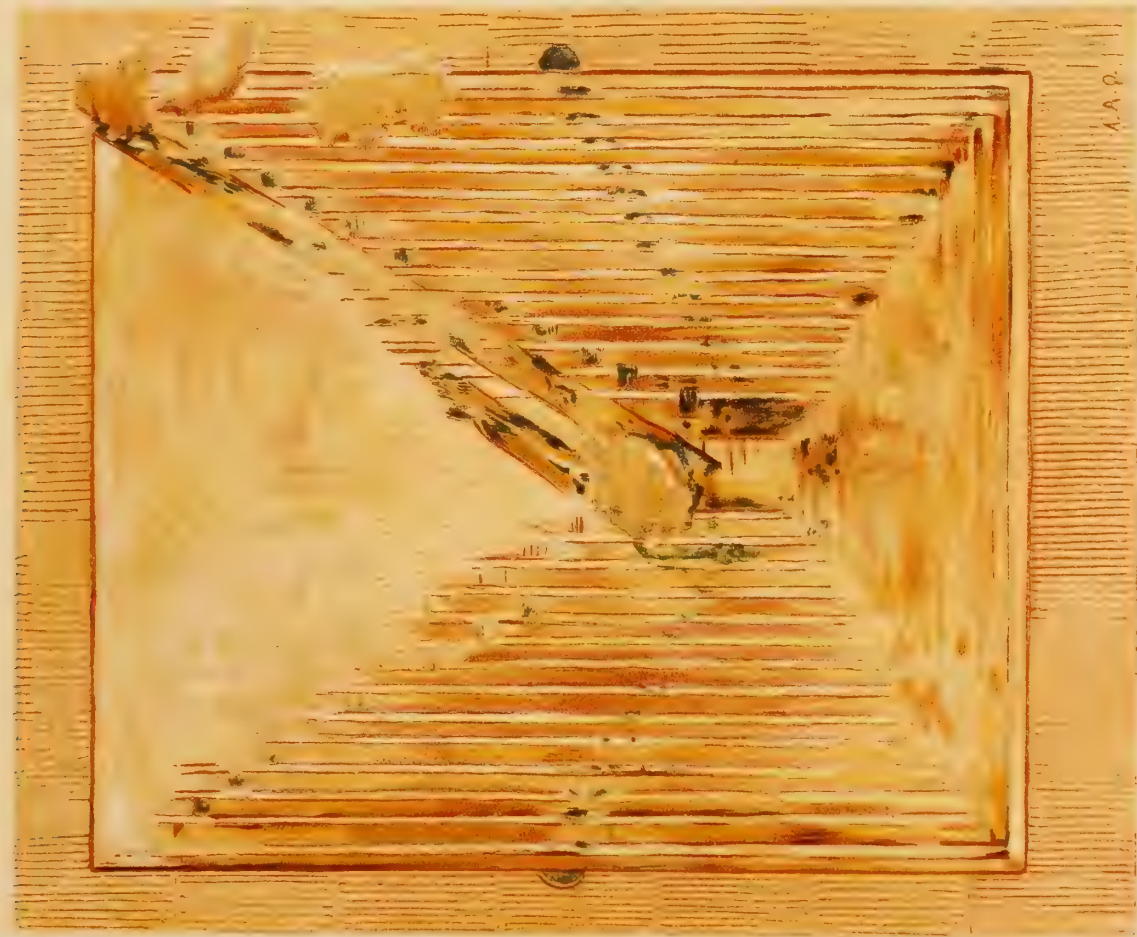




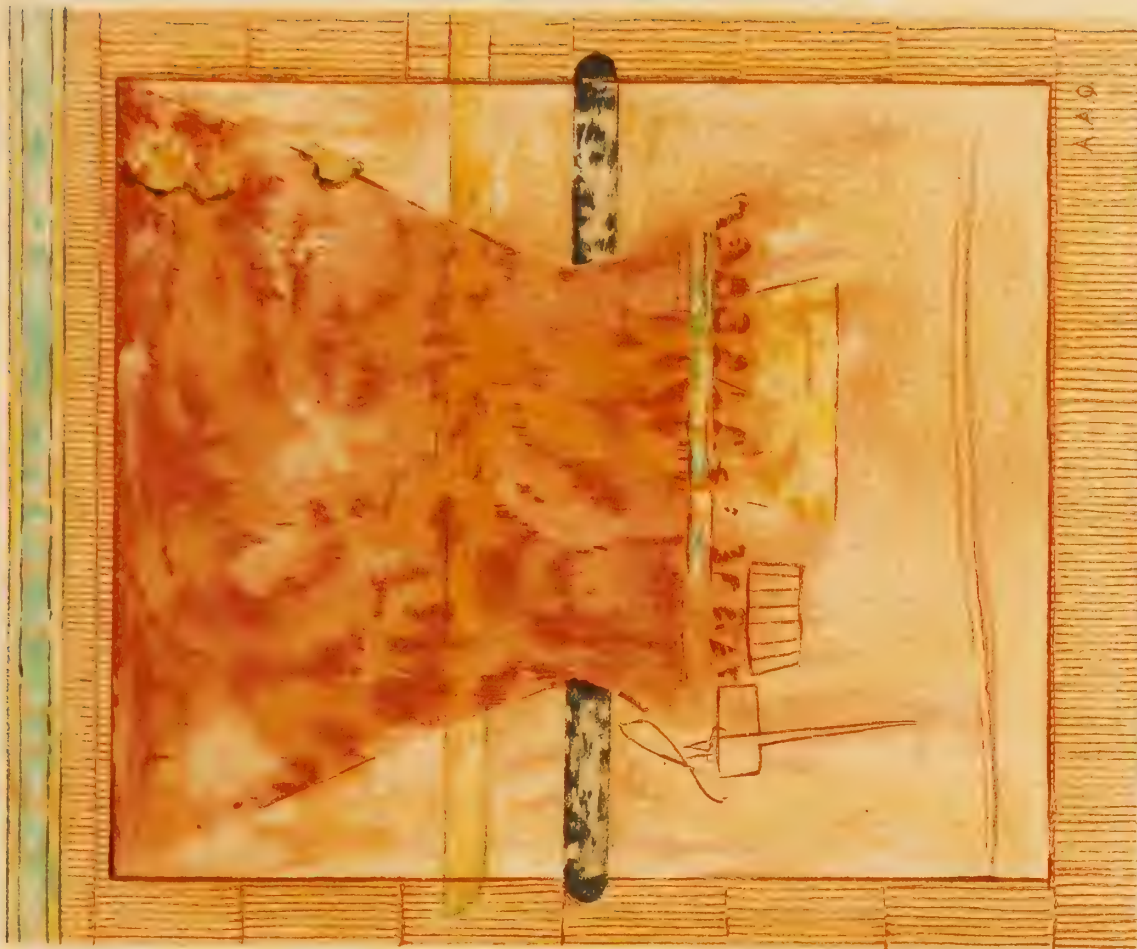




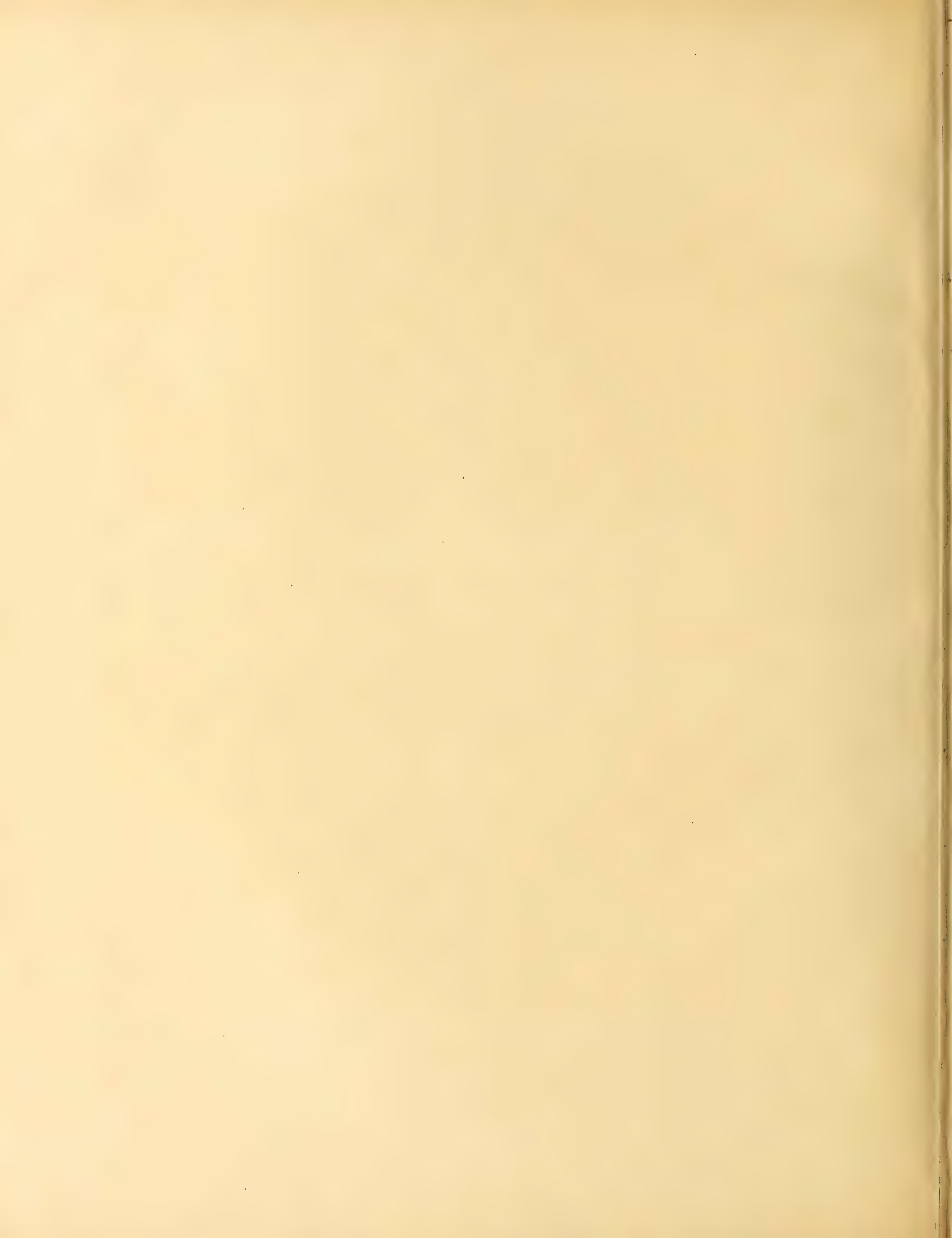




PL. XVI. 16.



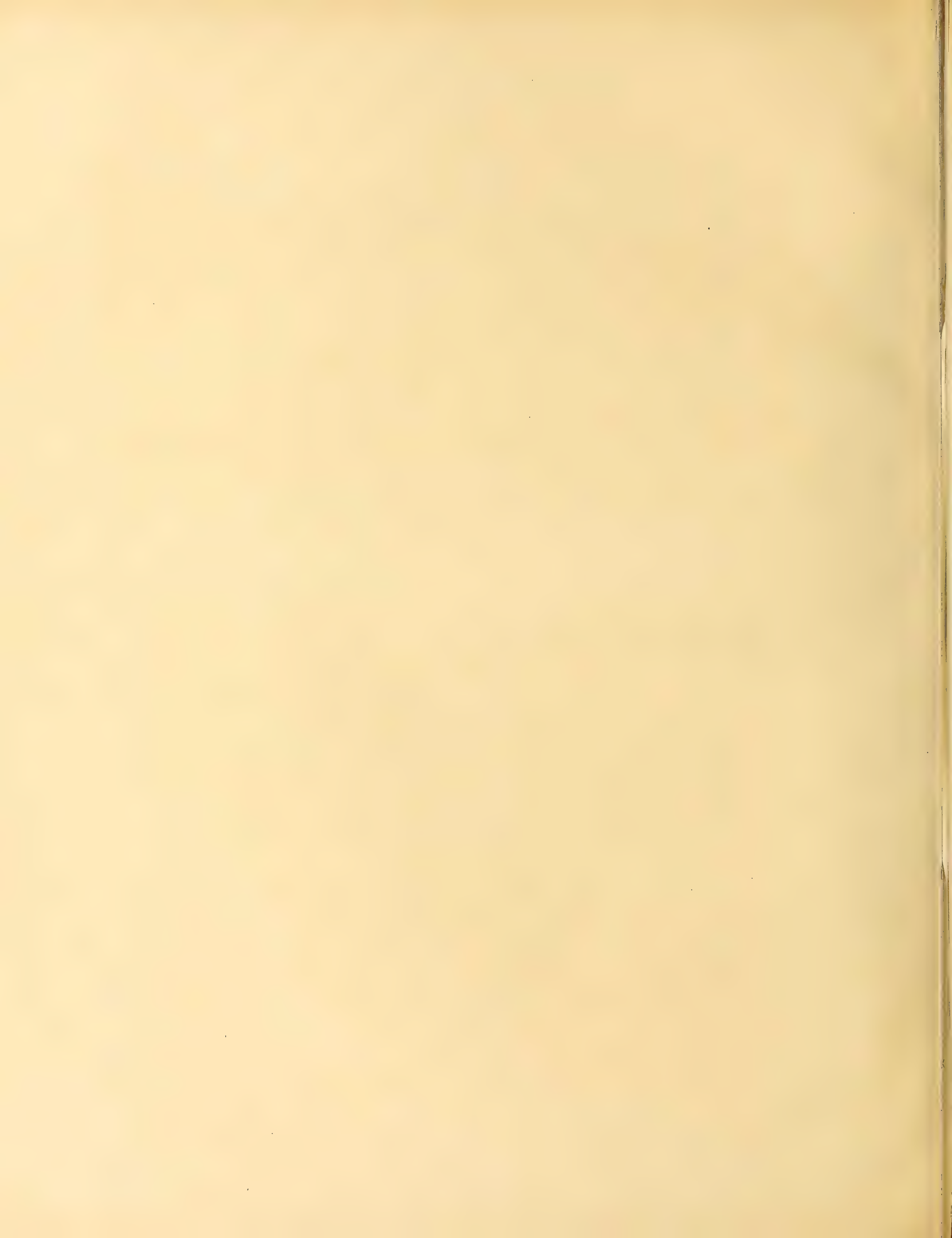
PL. XVII. 18.



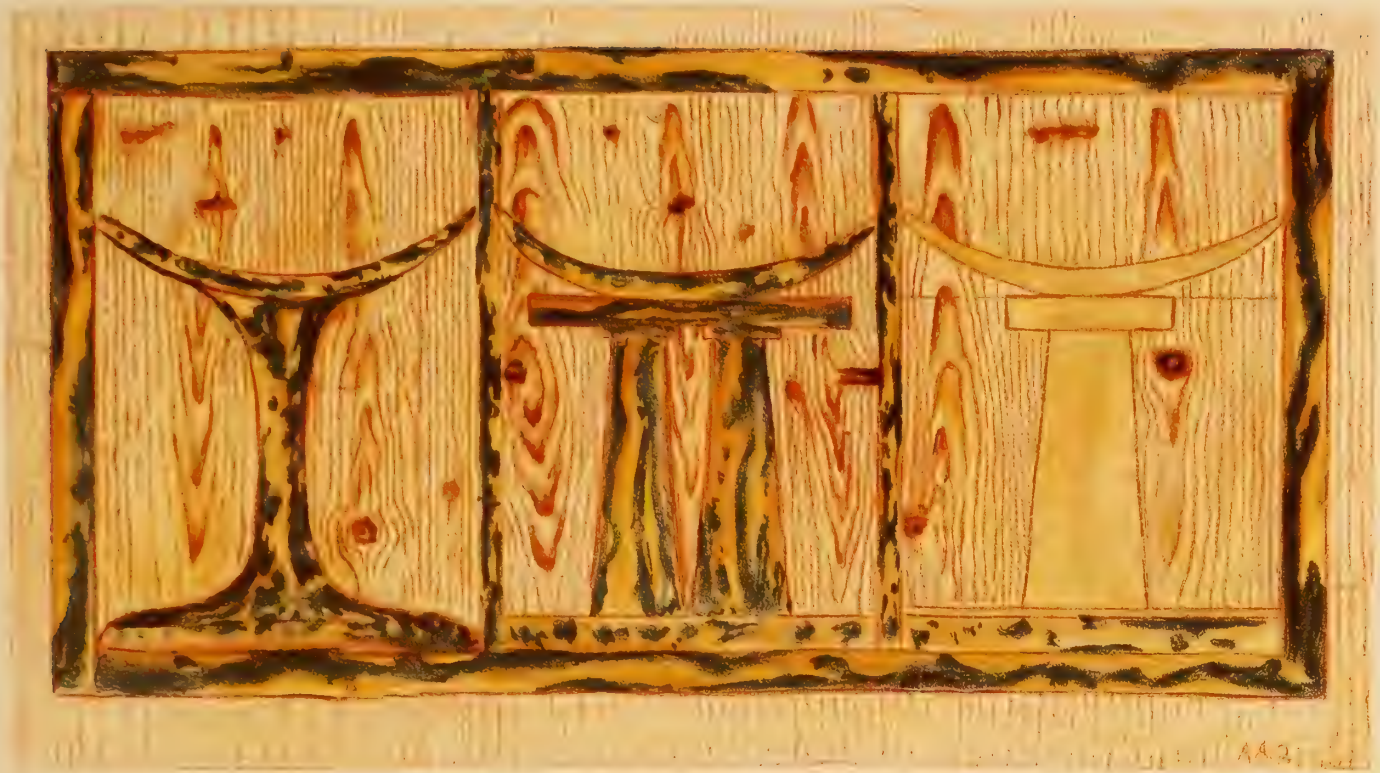




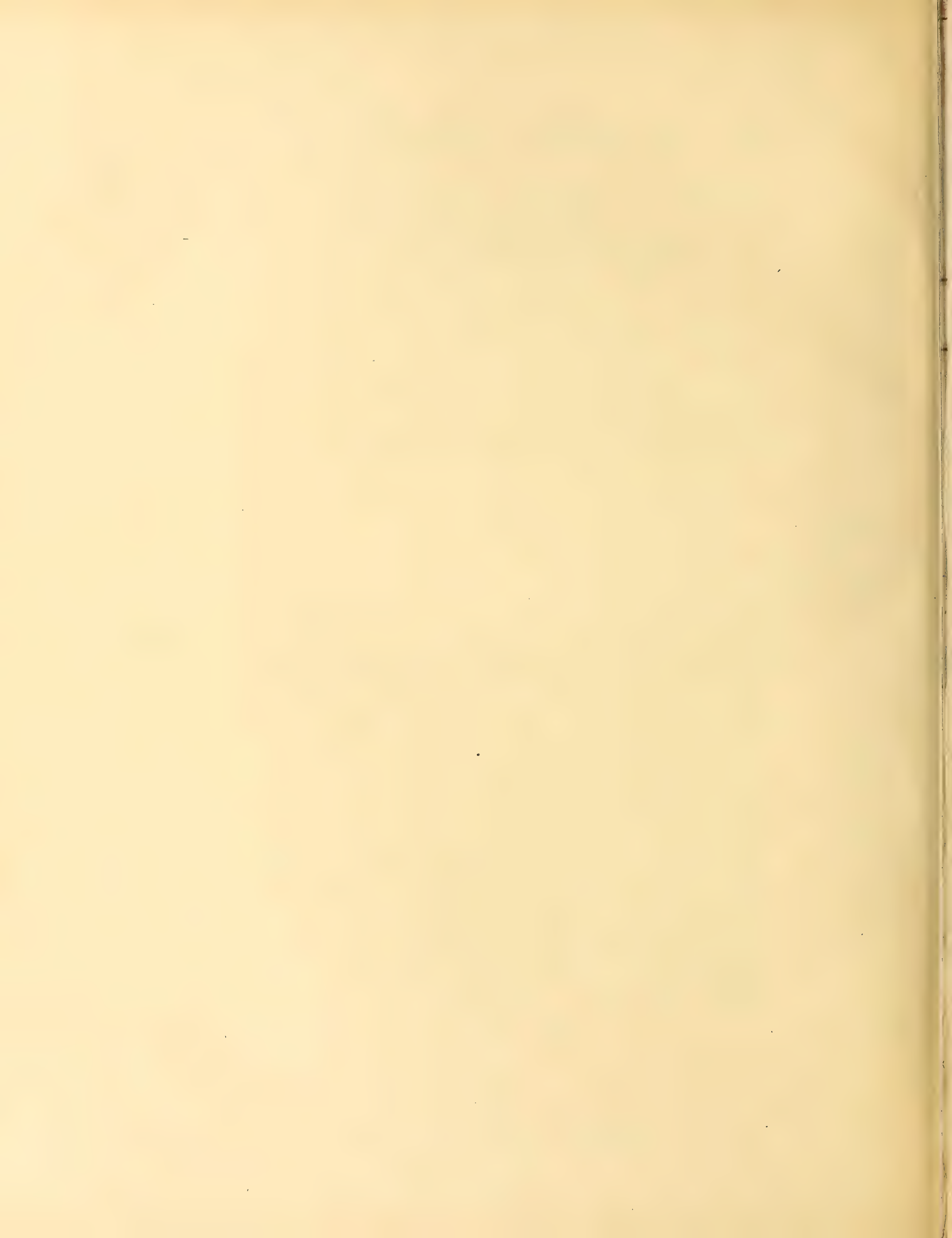
BARRELS.



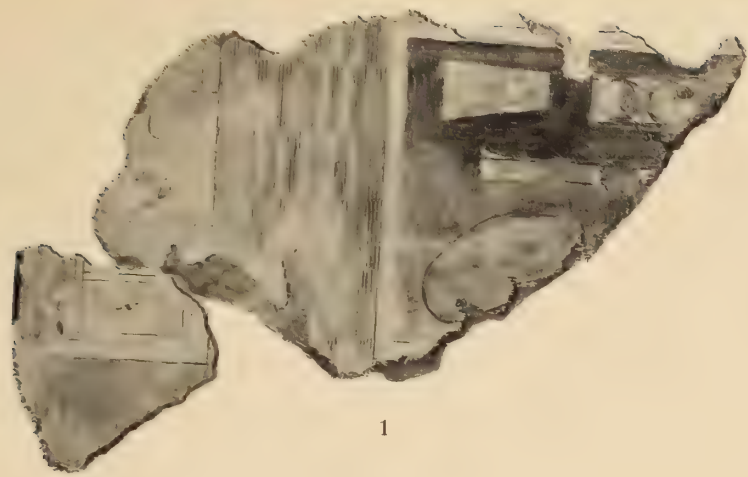




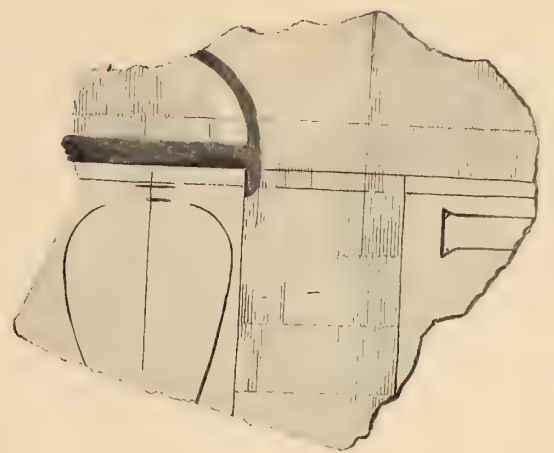
TRAYS 57 AND 55.



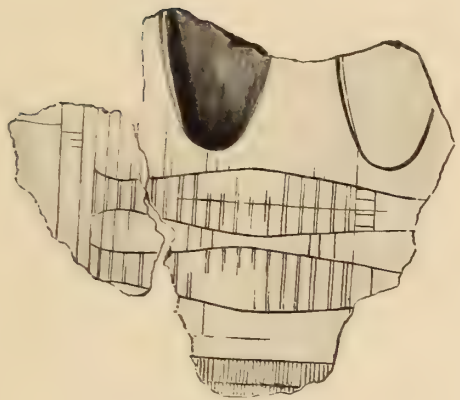




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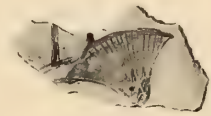
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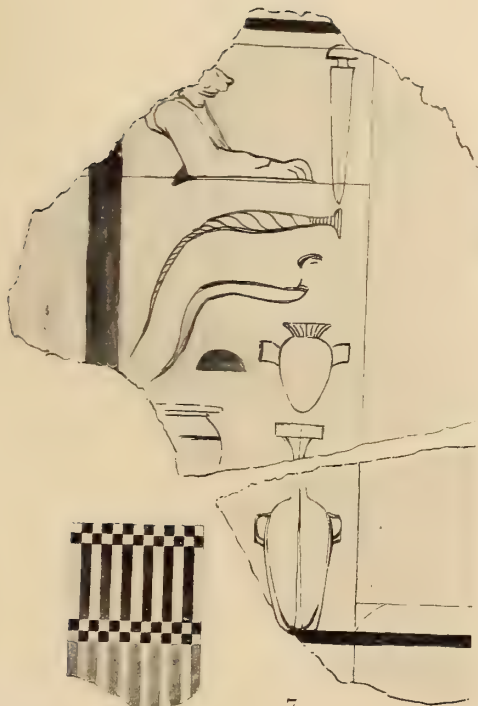
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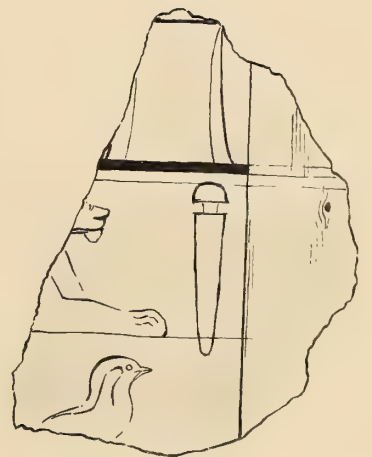
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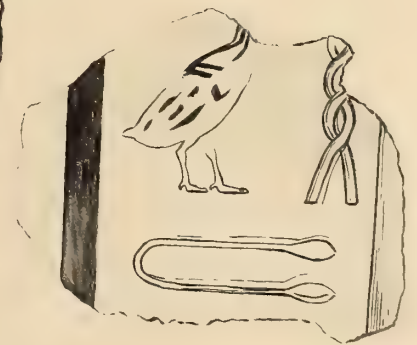
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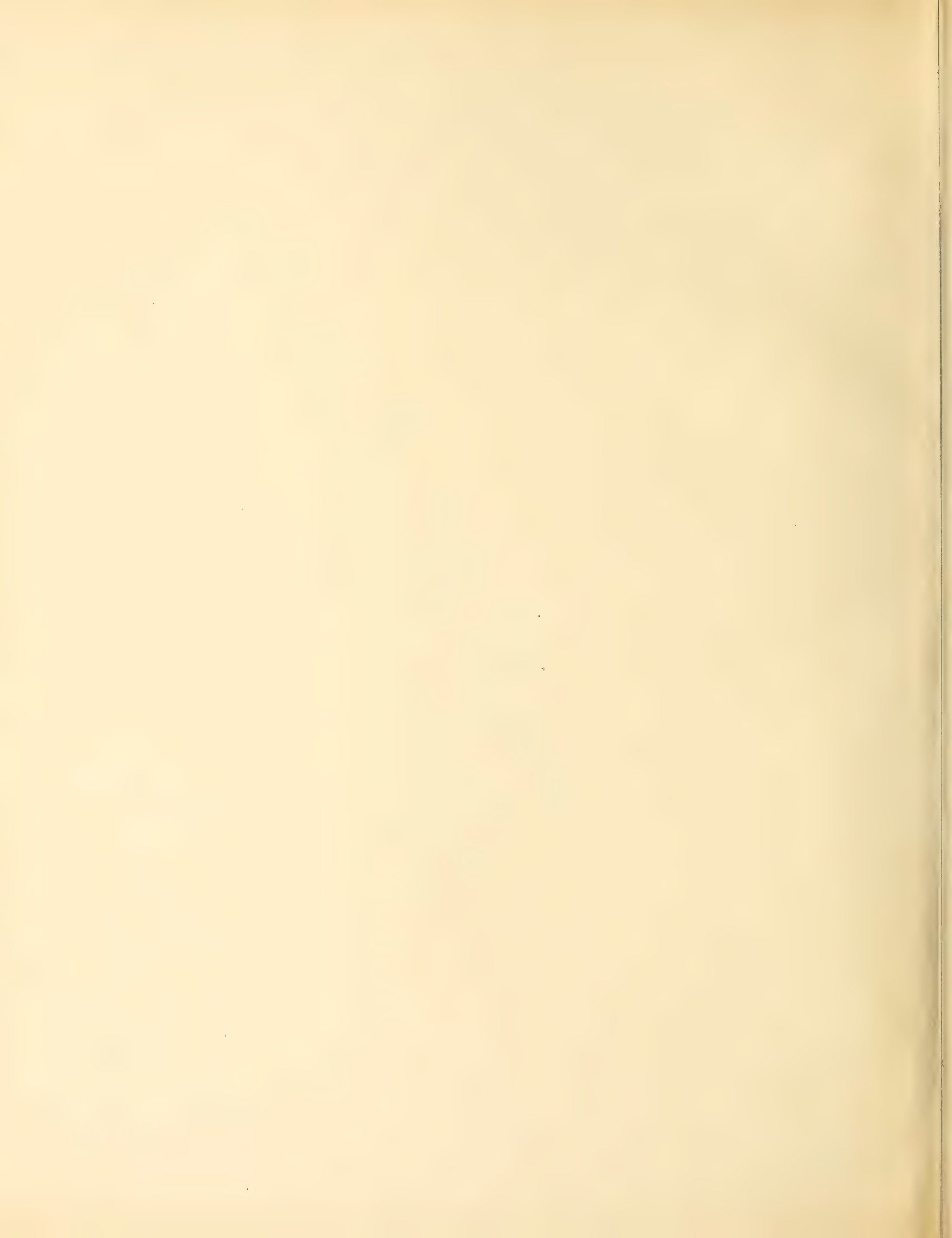


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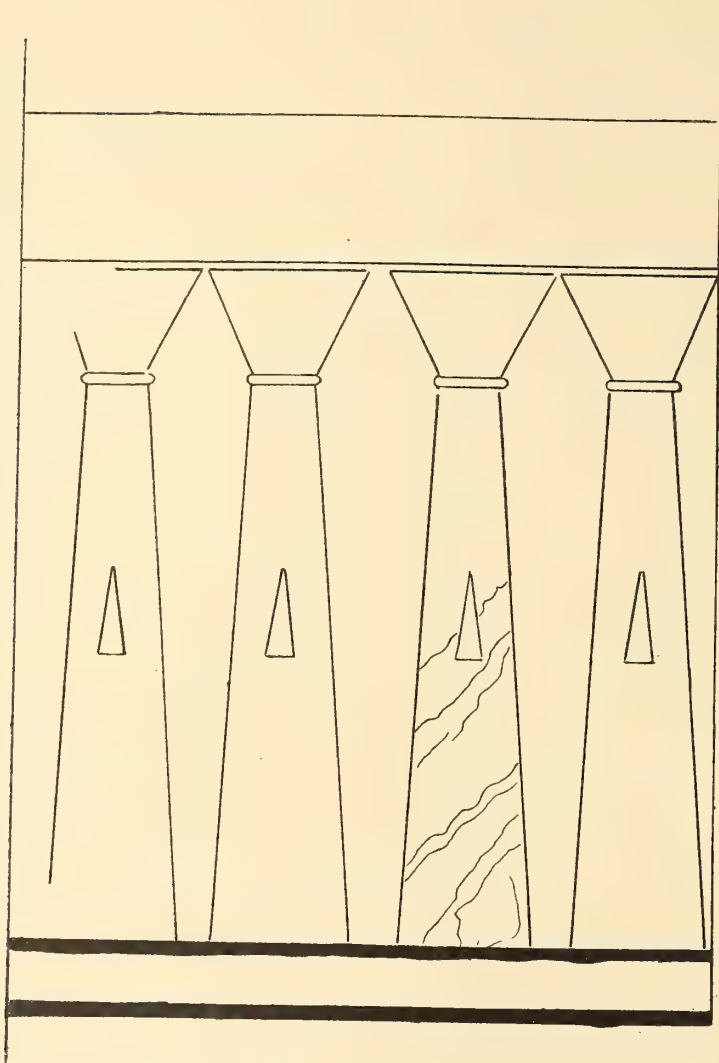
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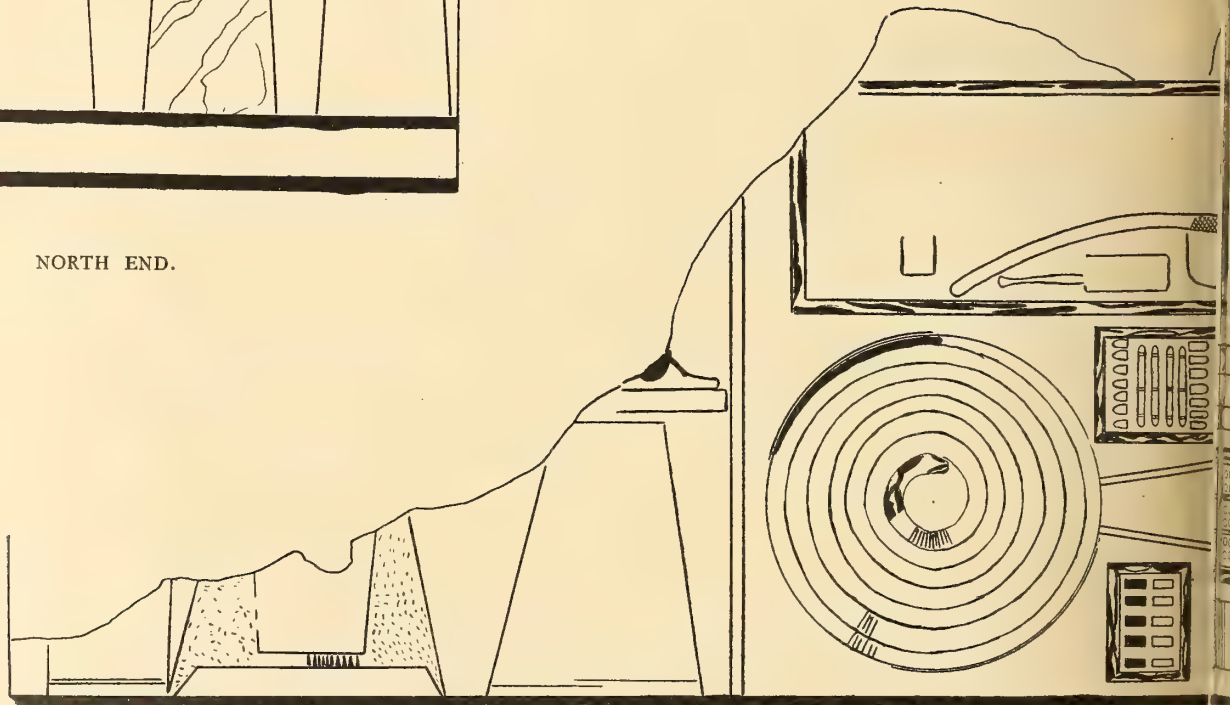




EXCAVATIONS AT SAQQARA, T. V.



NORTH END.



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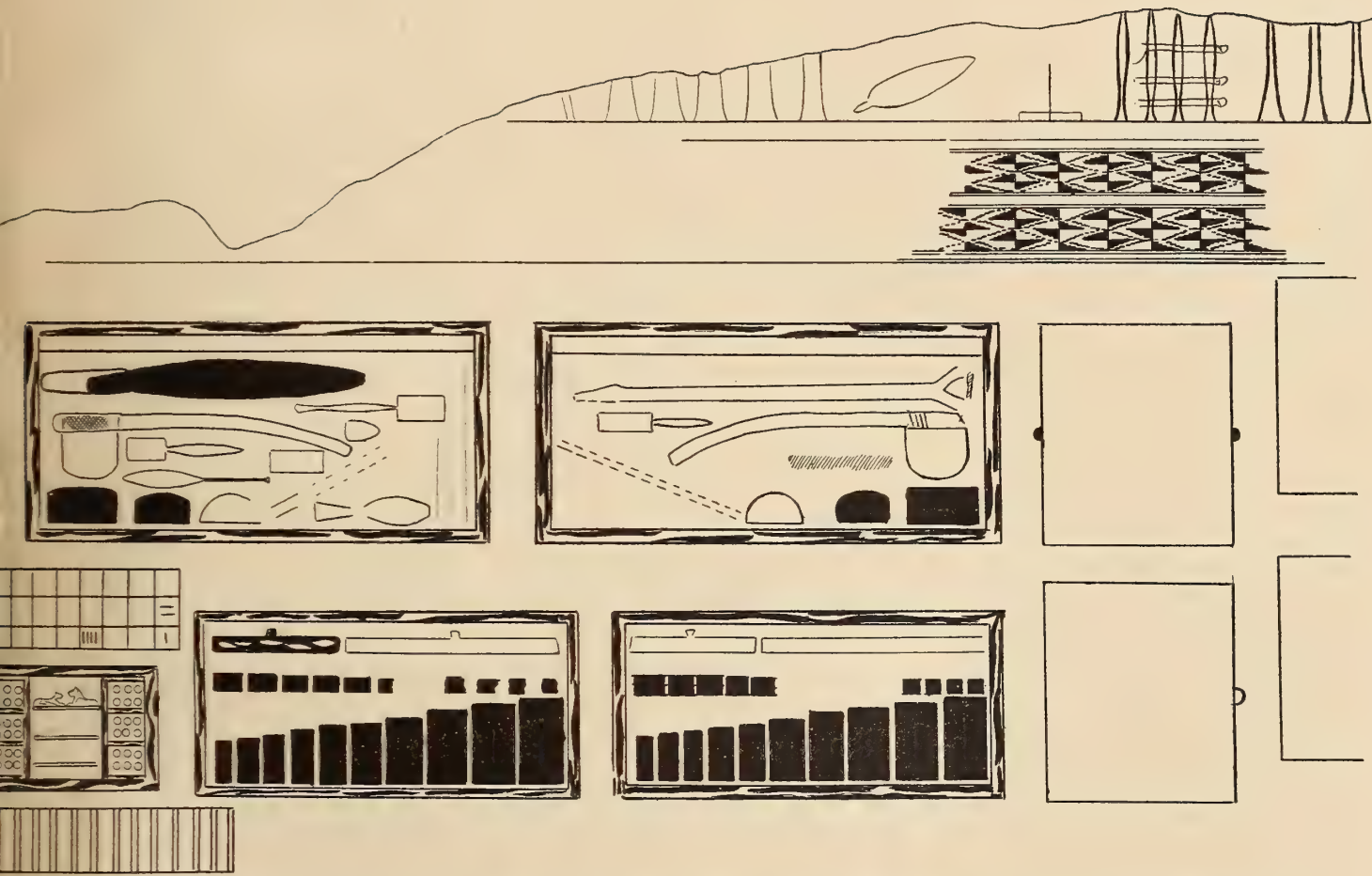
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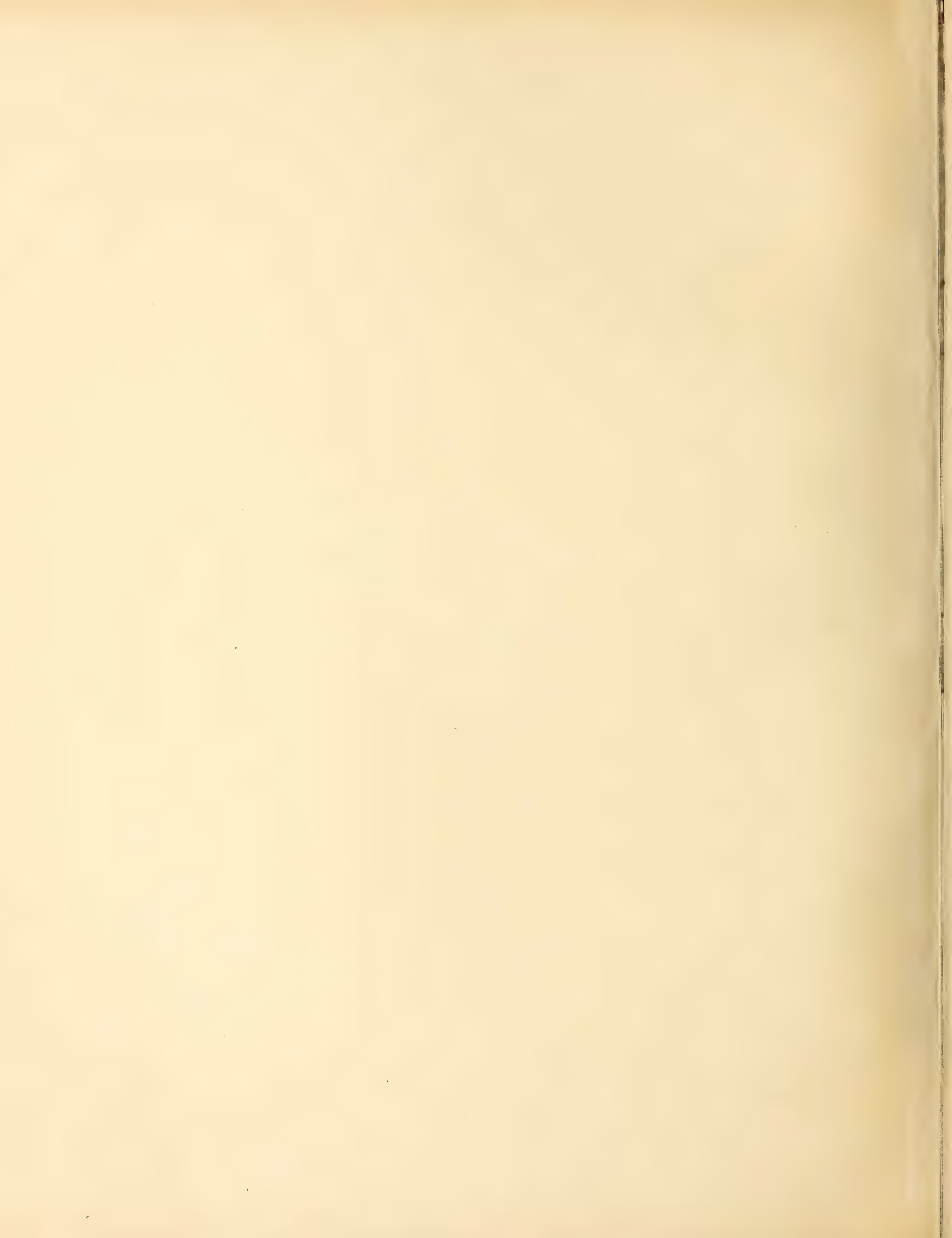
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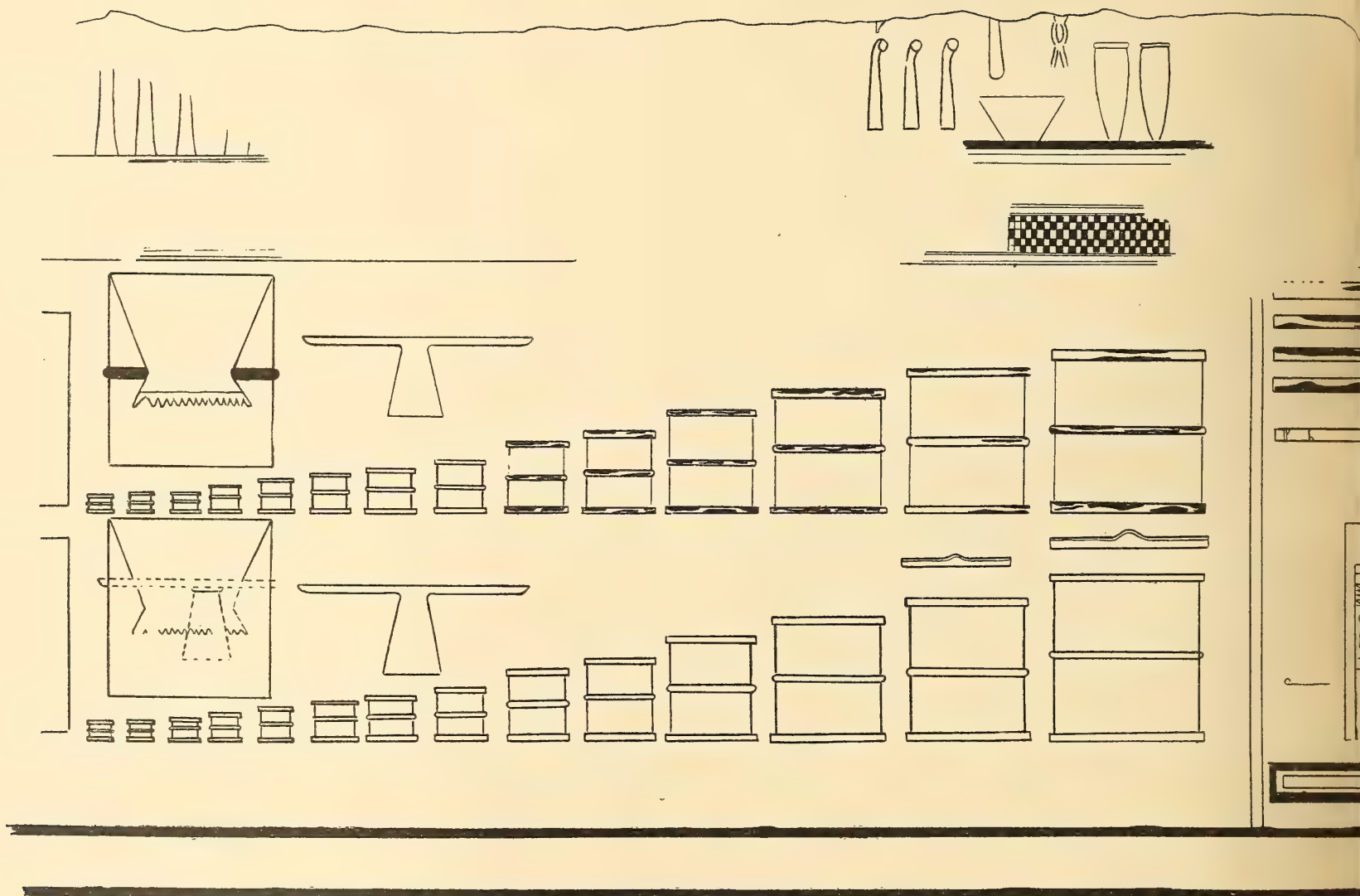
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AST WALL.









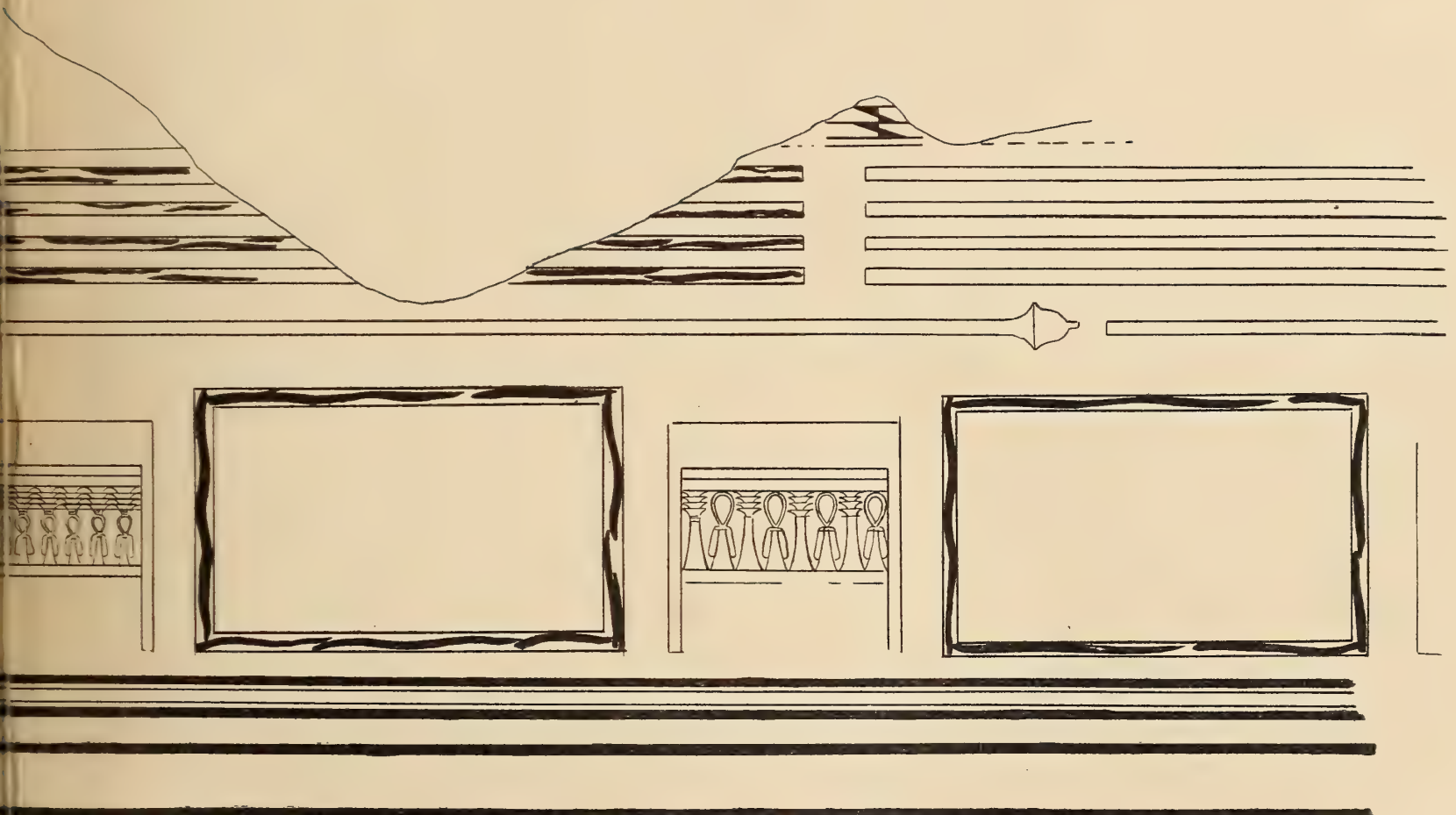
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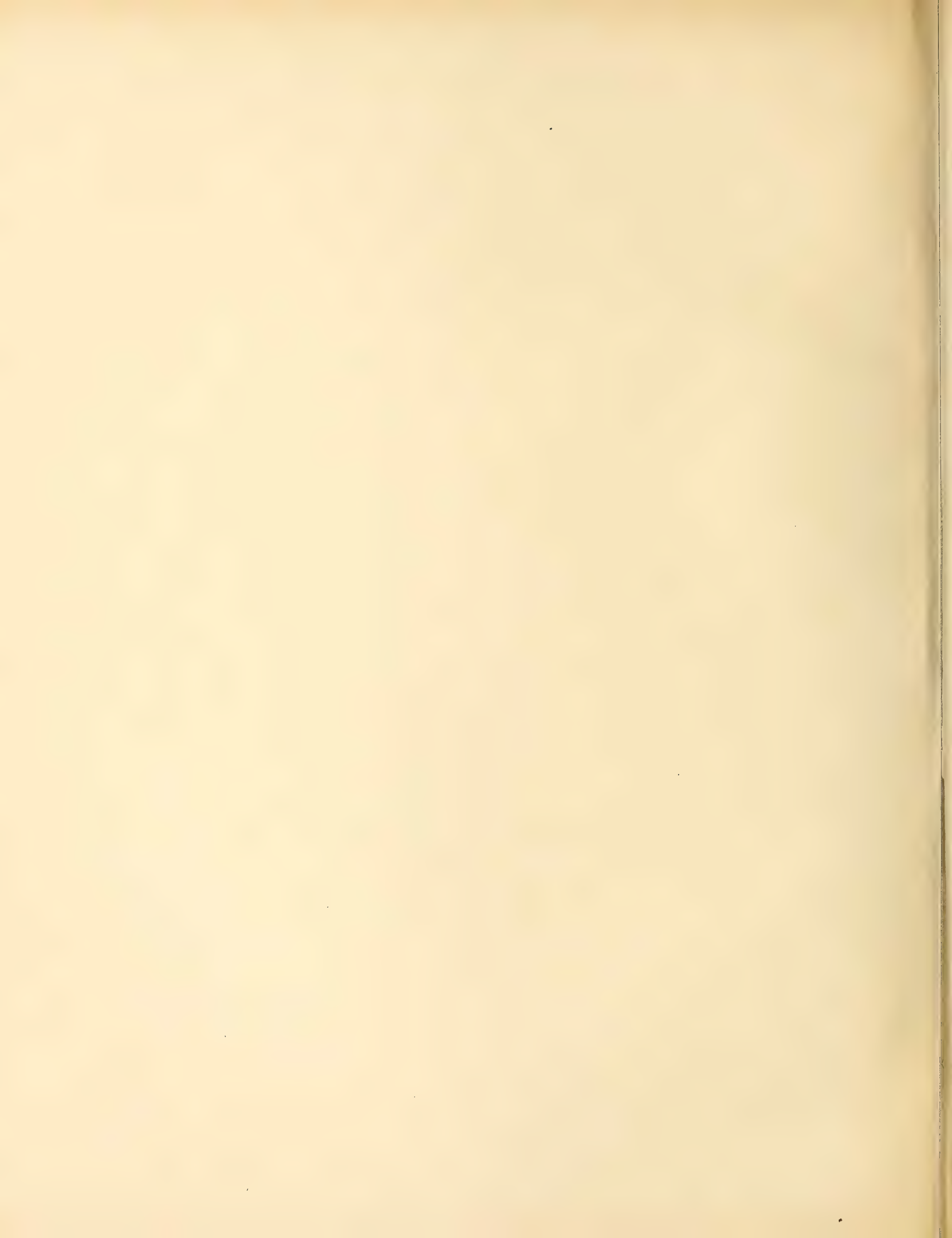
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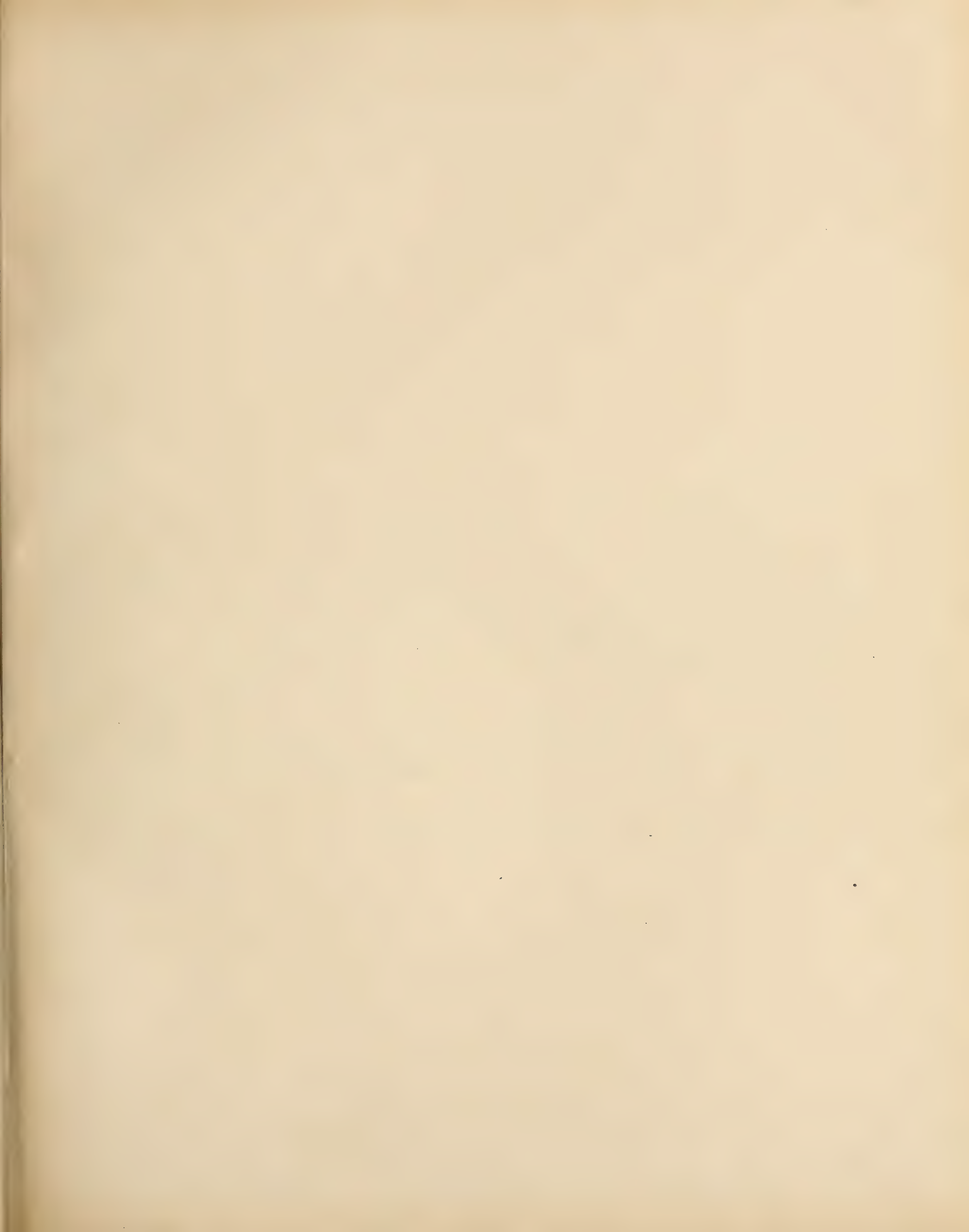
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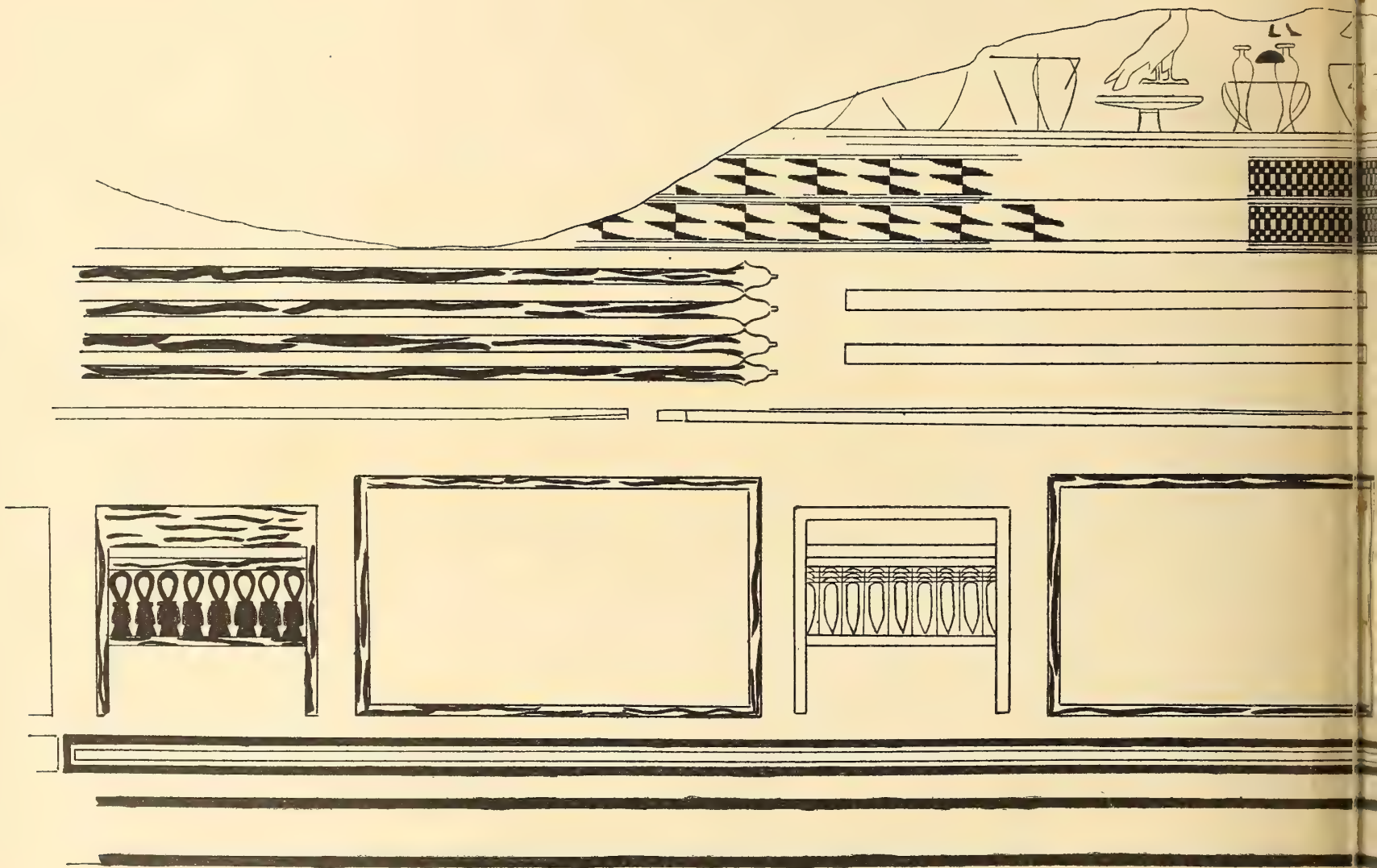
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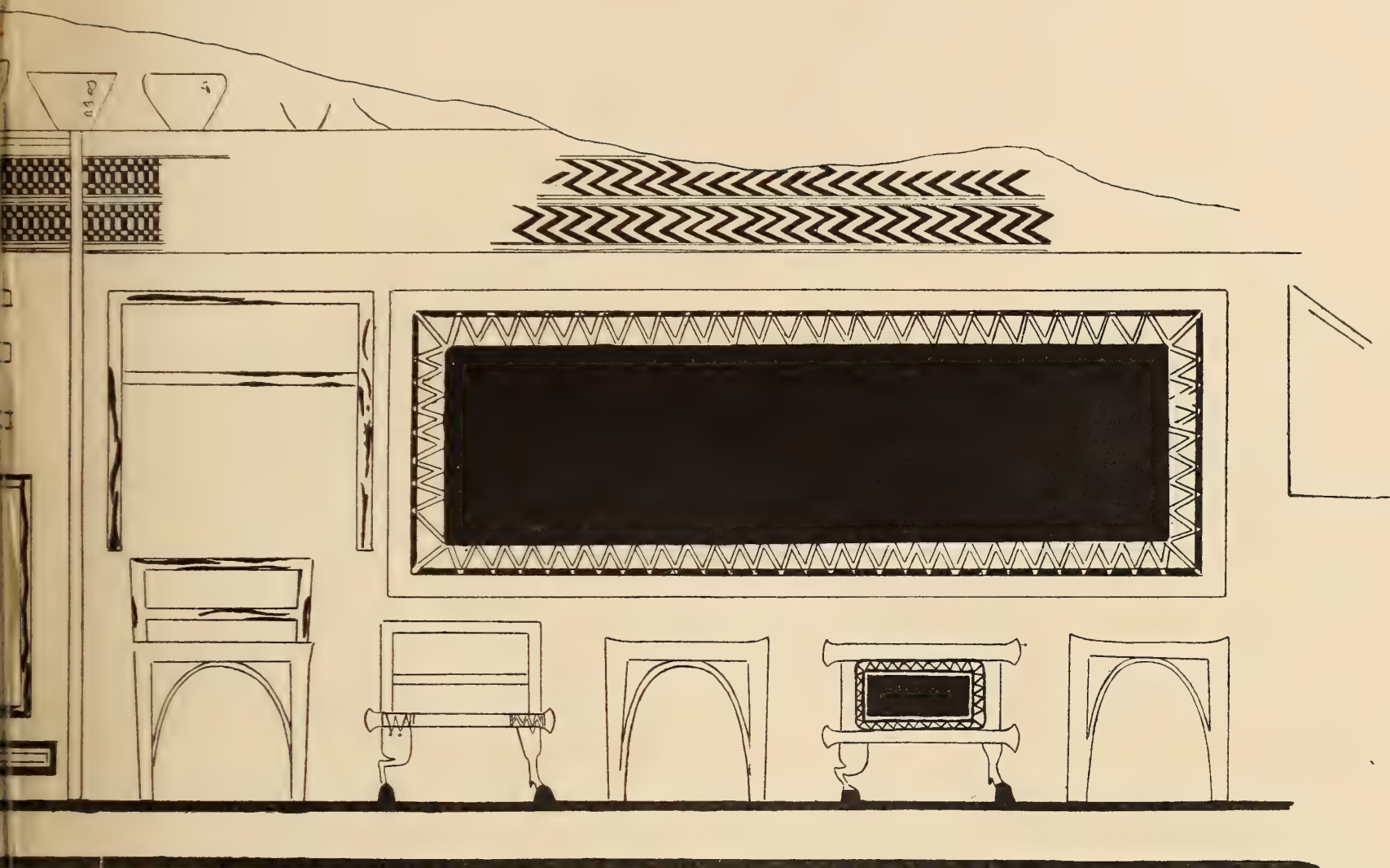
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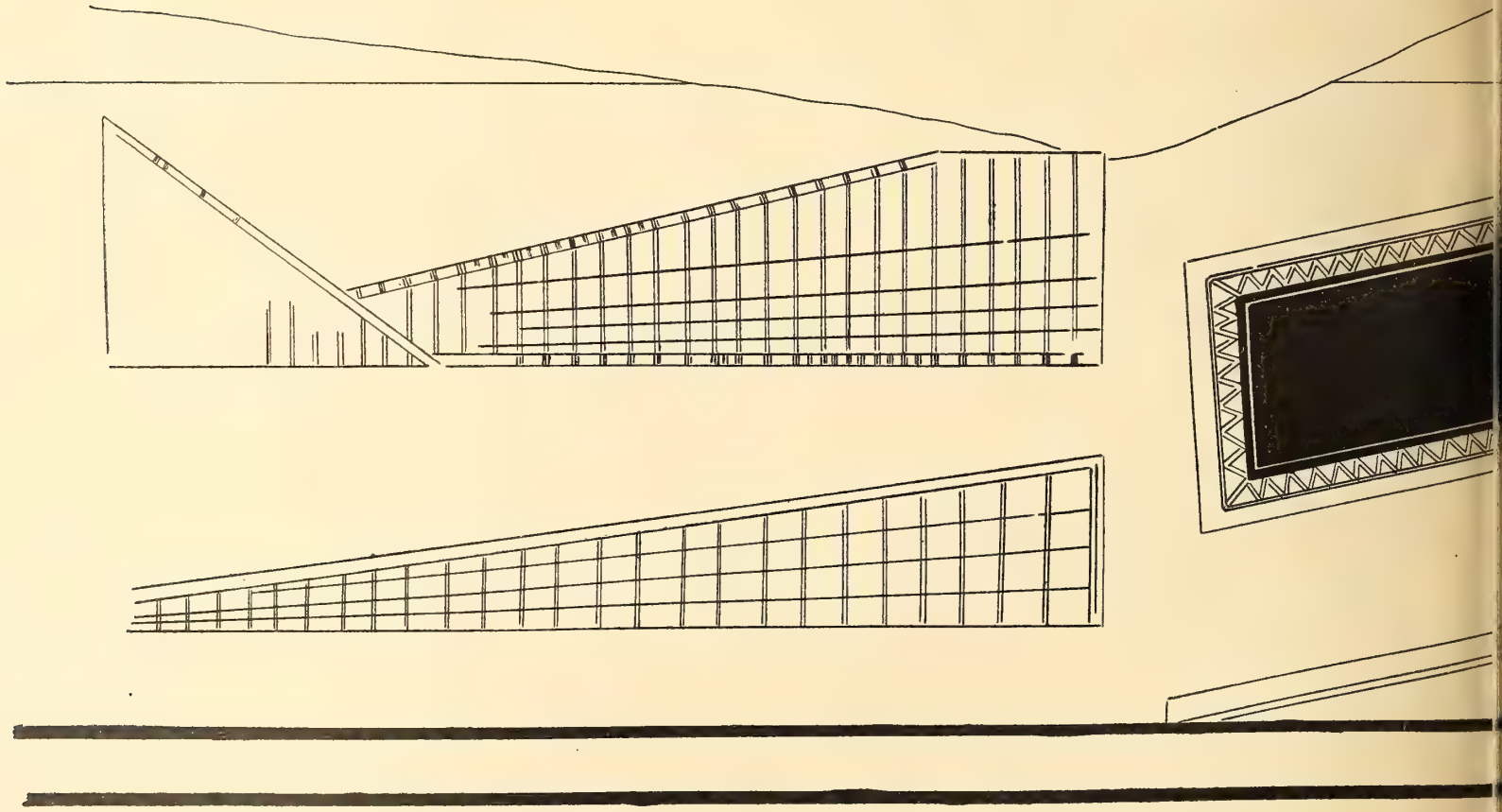
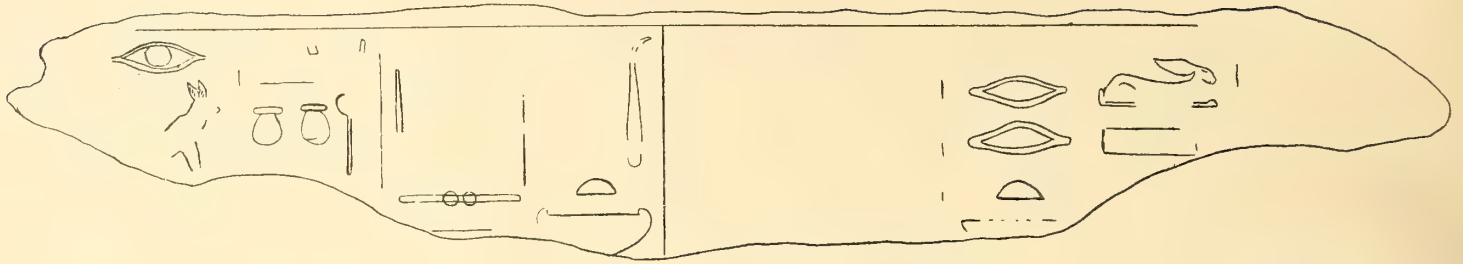
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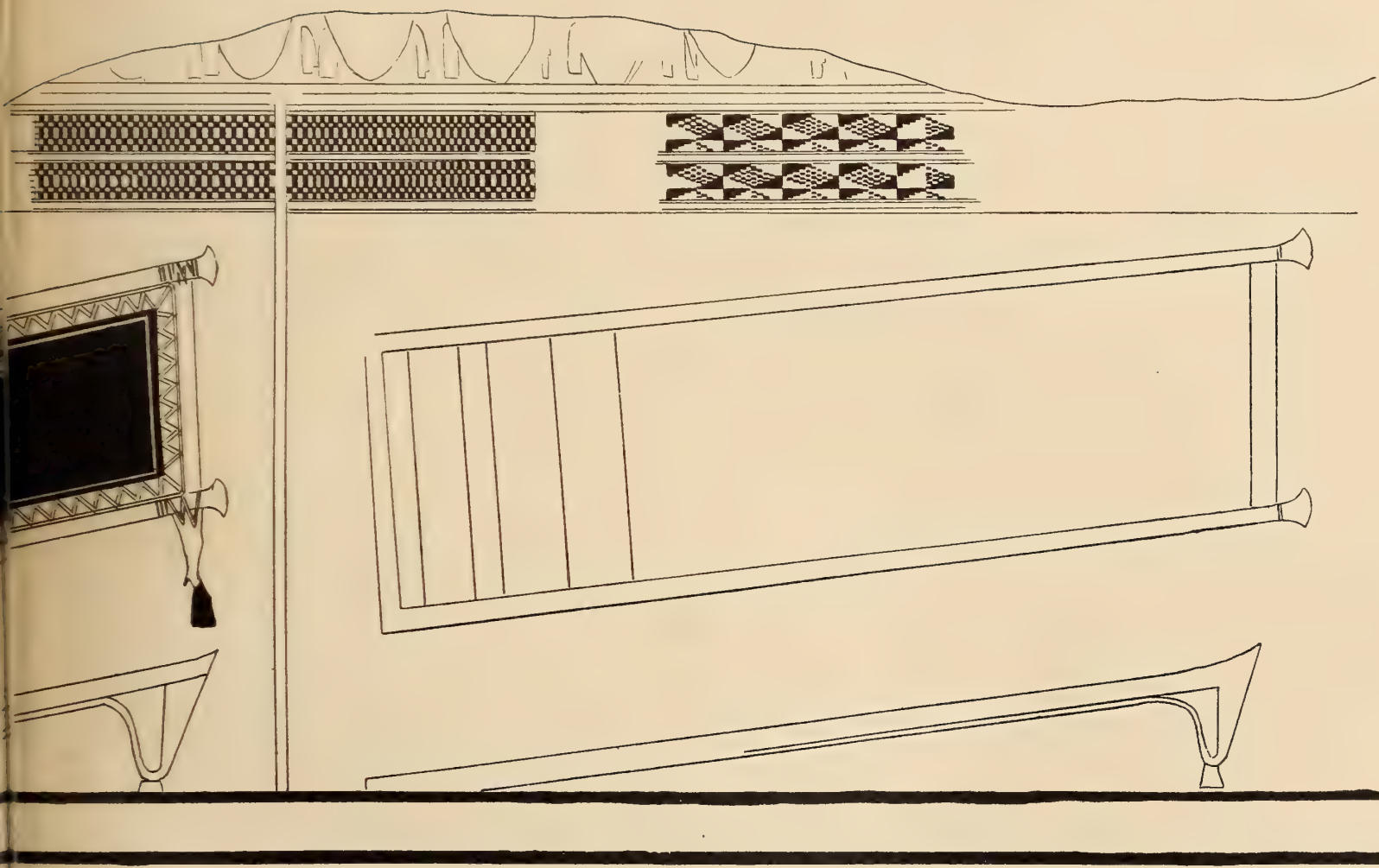


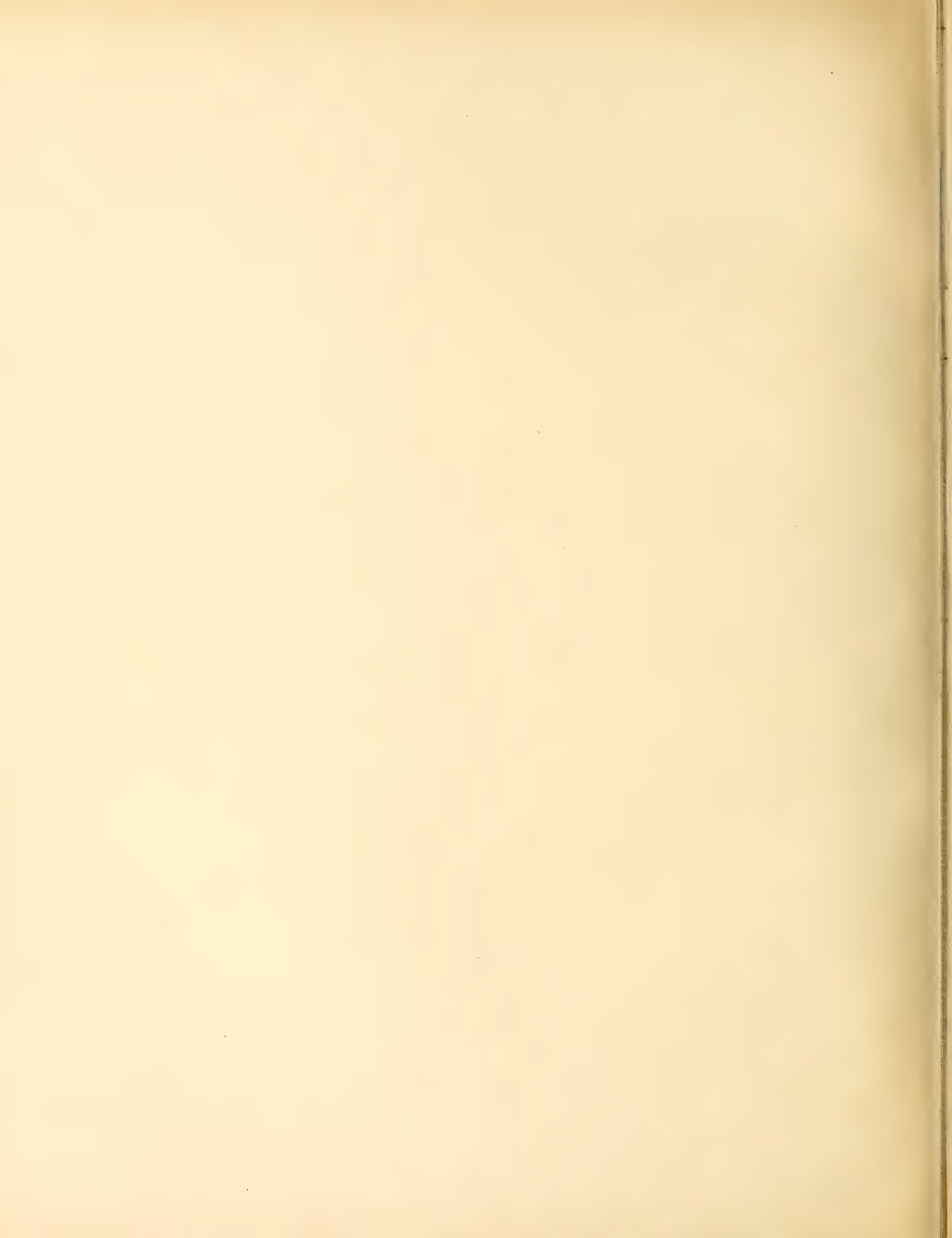




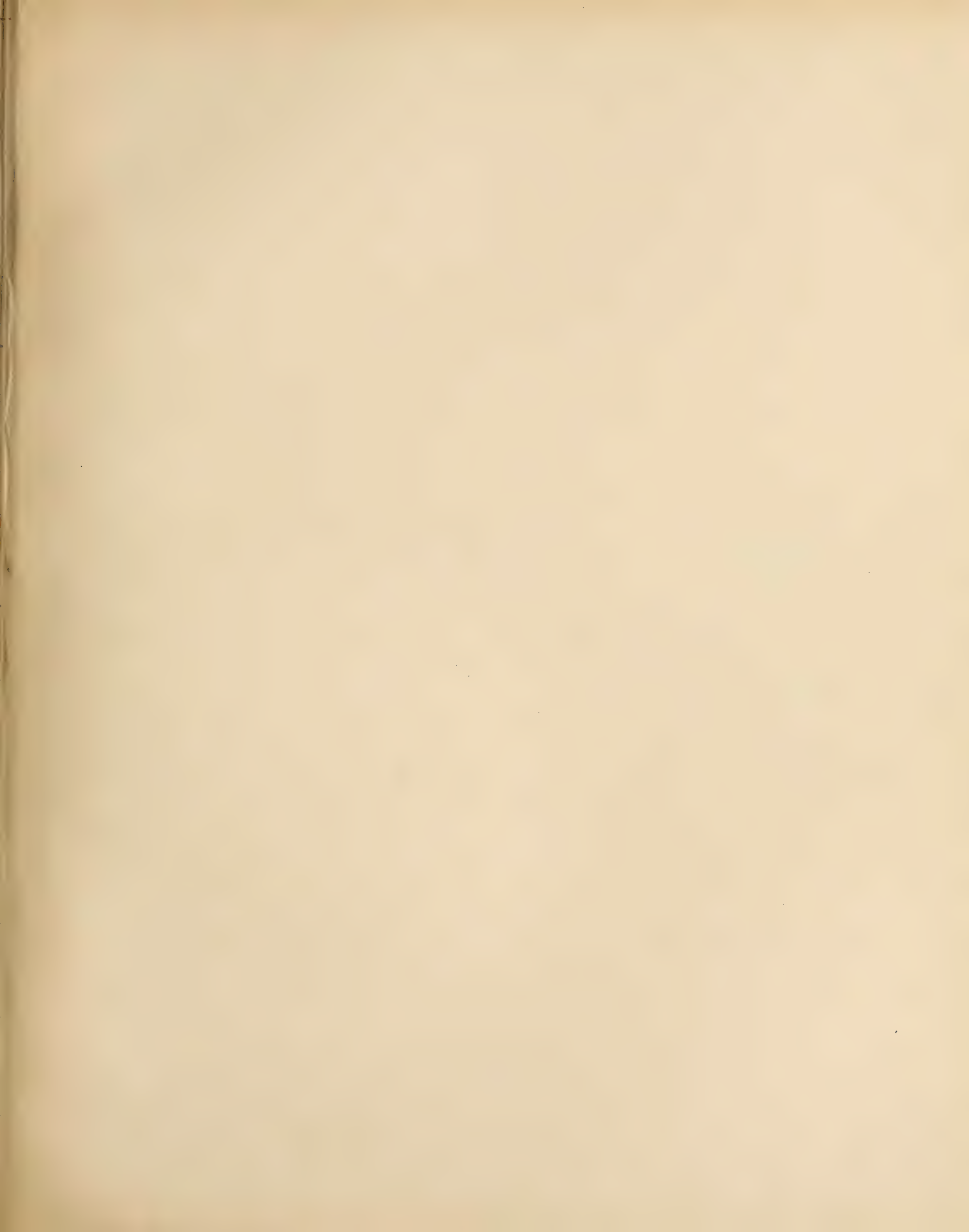


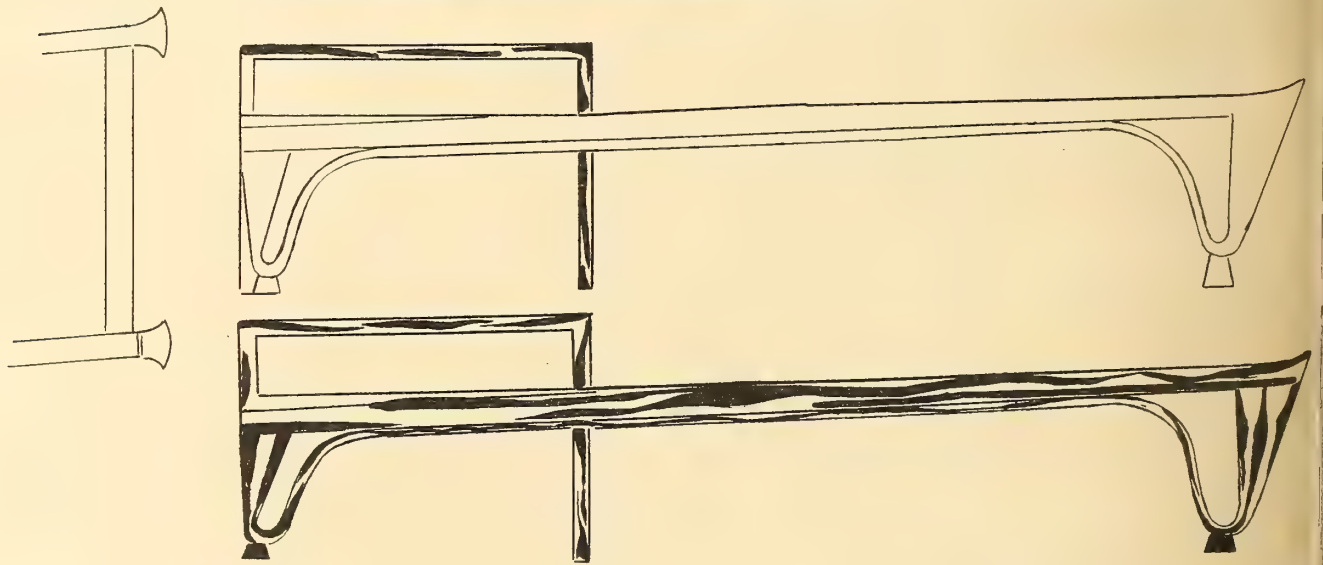
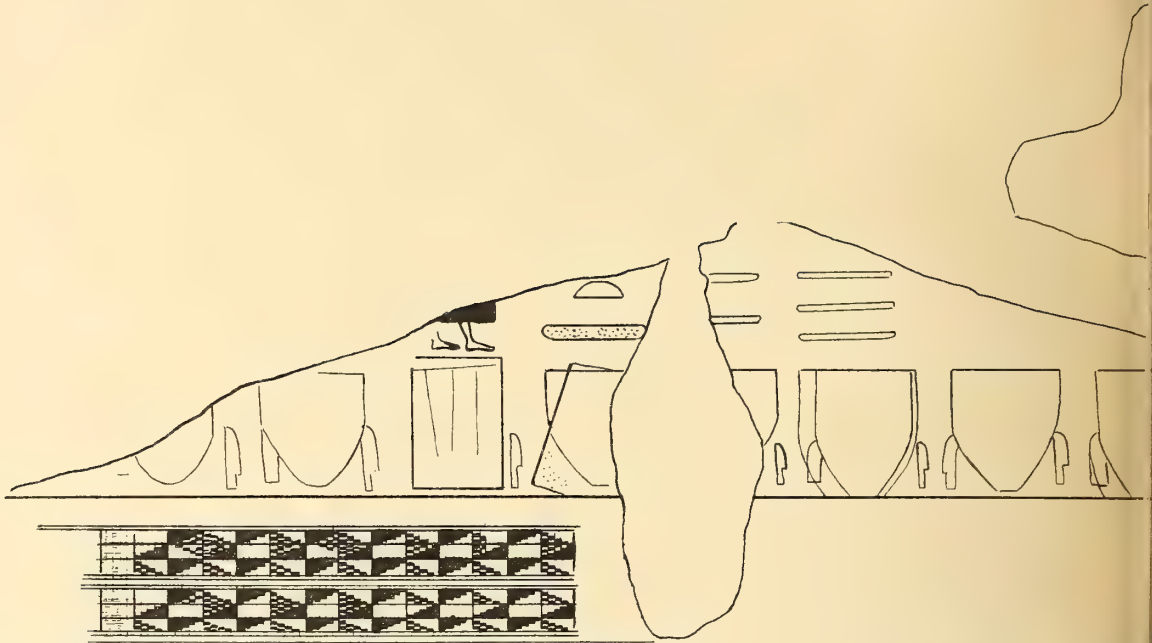




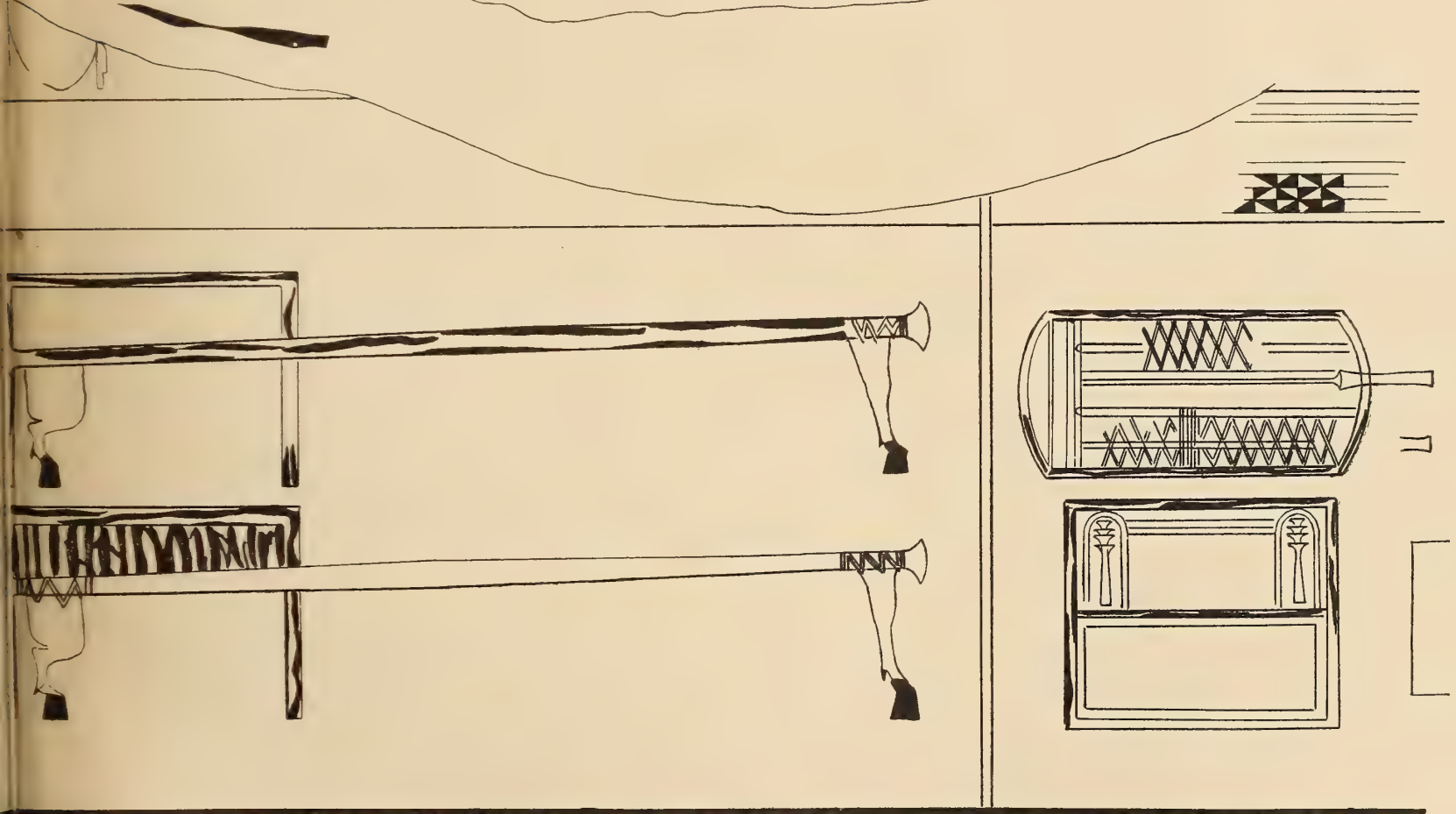
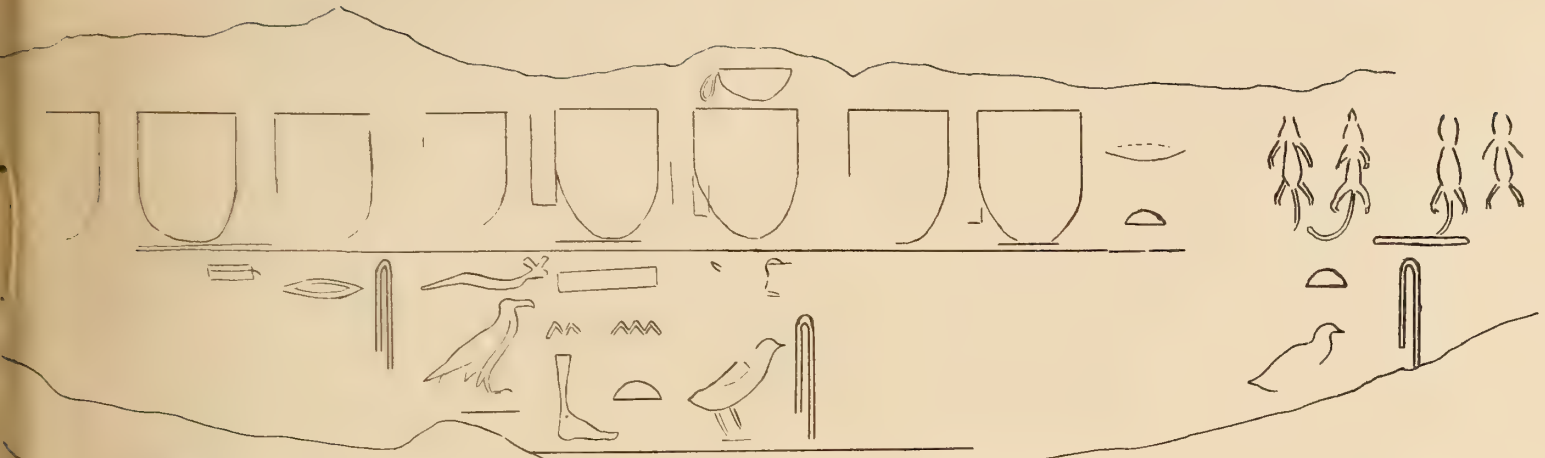












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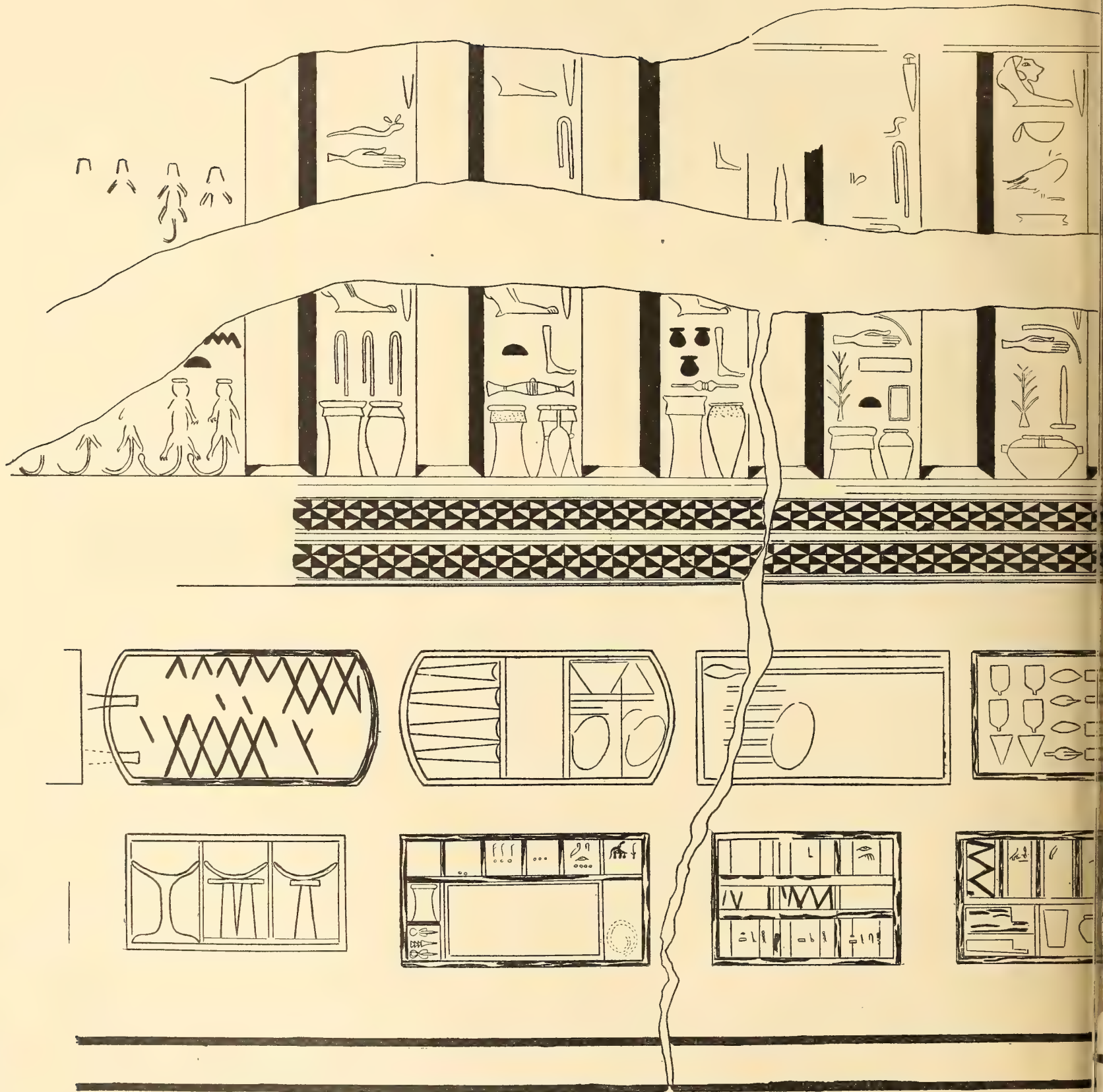
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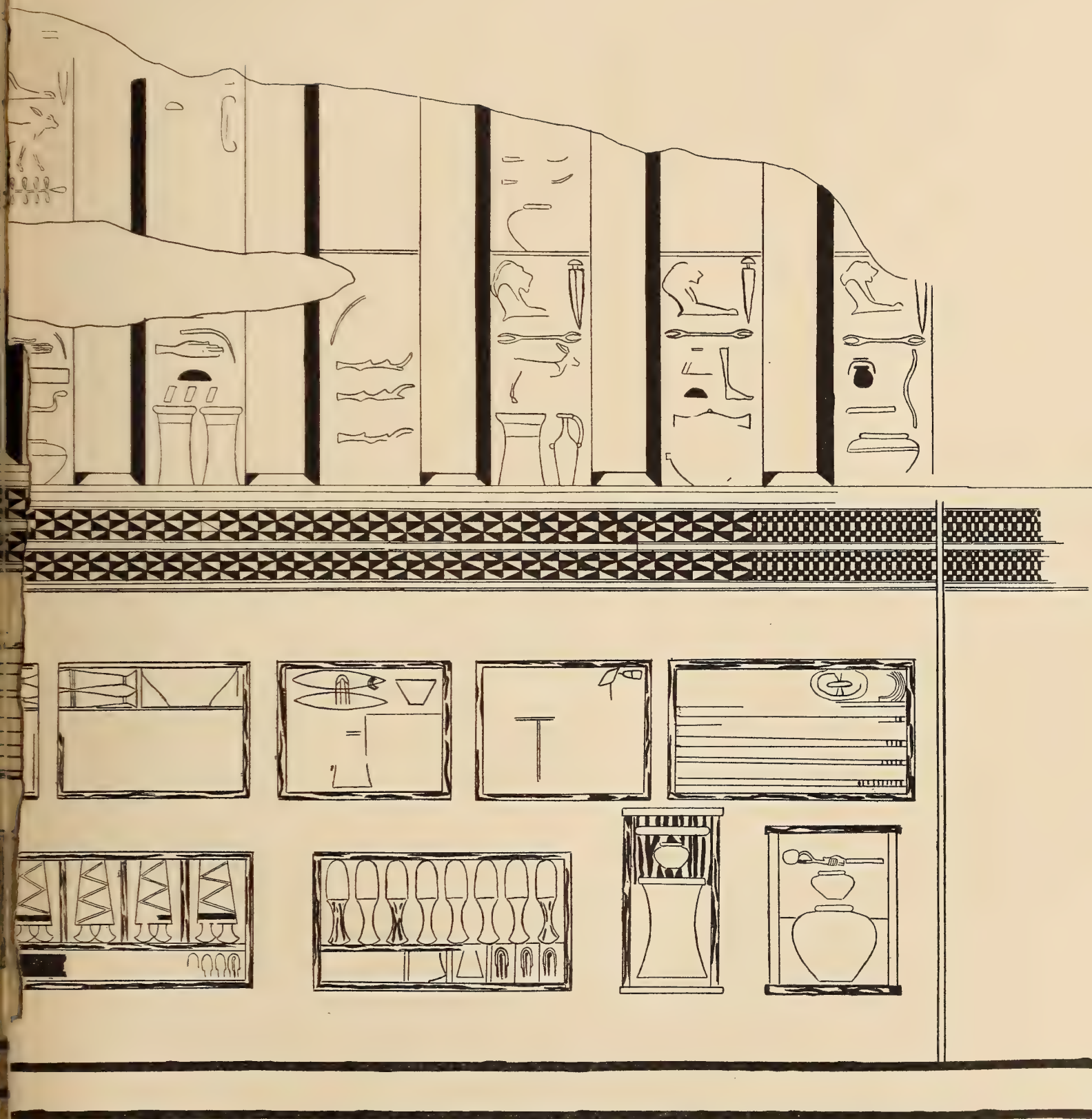
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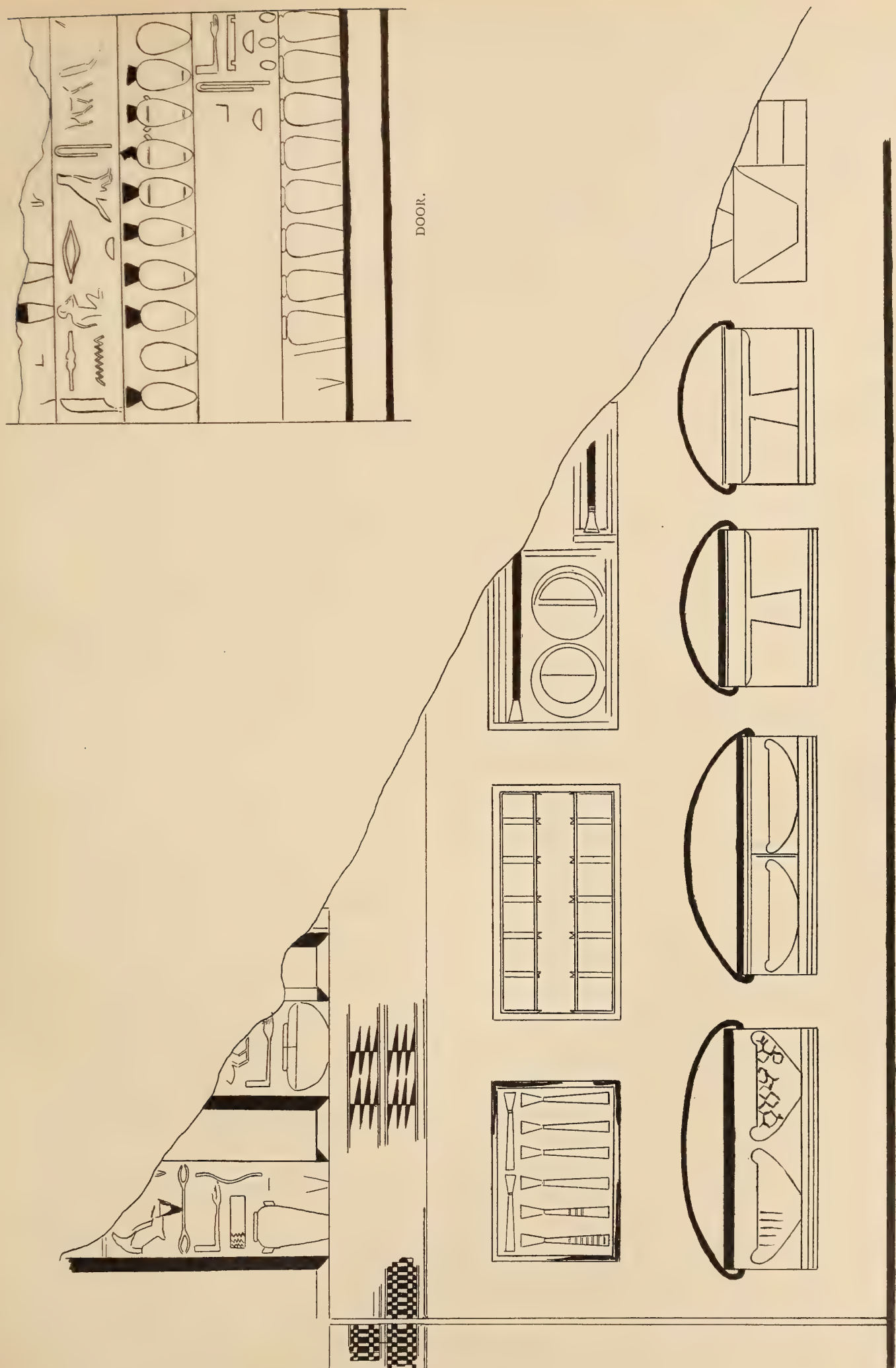
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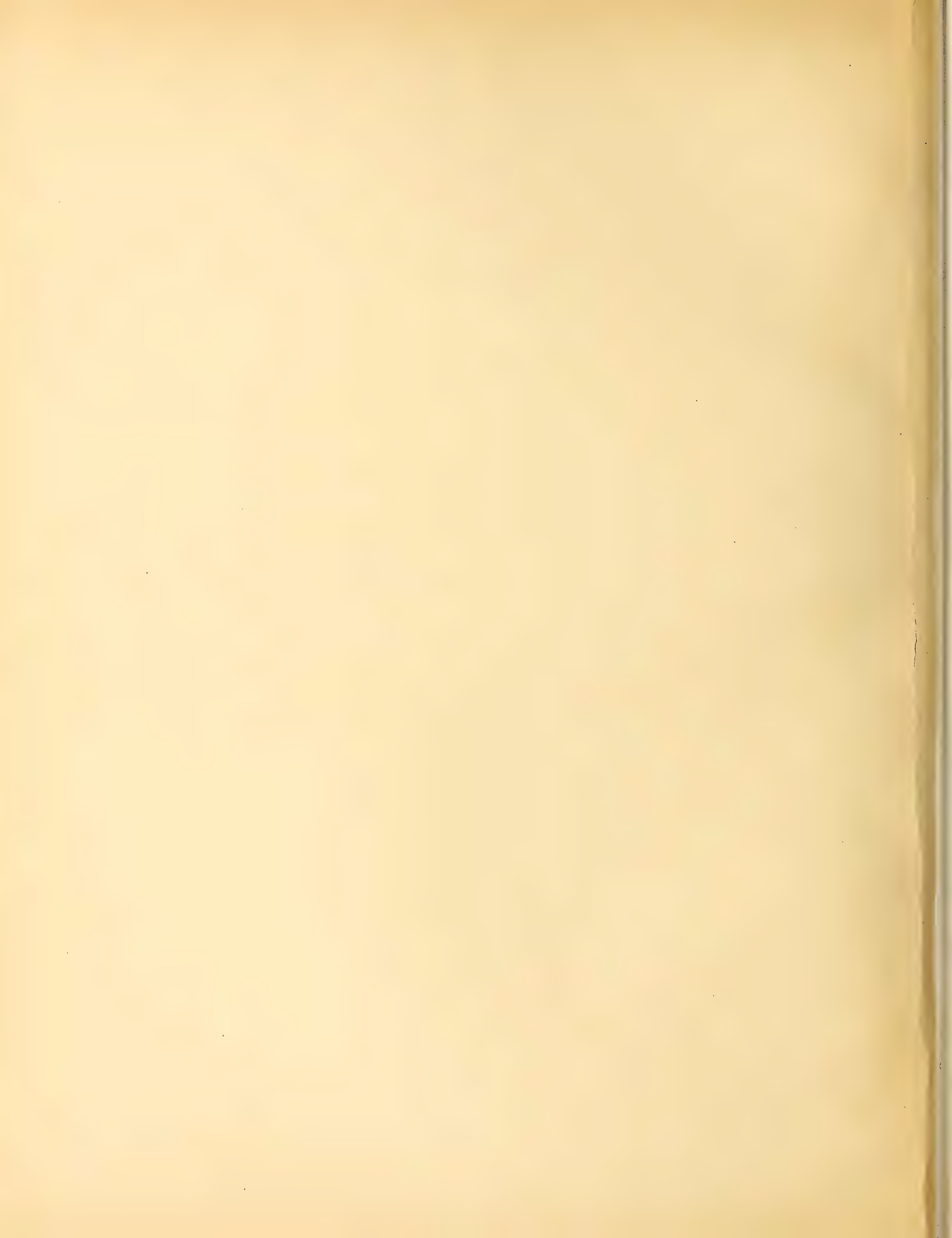
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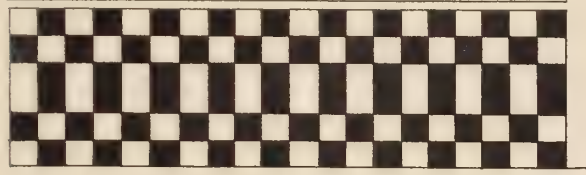
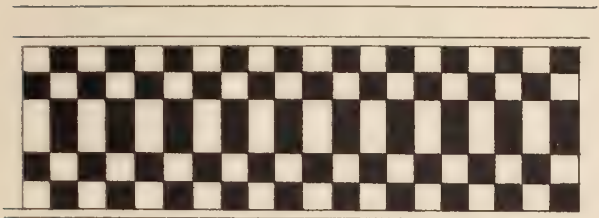
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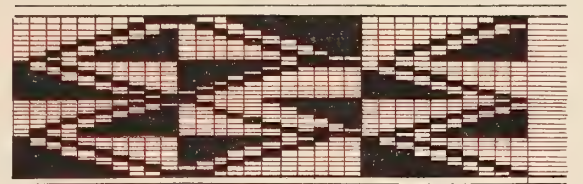
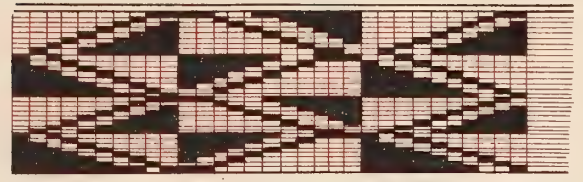
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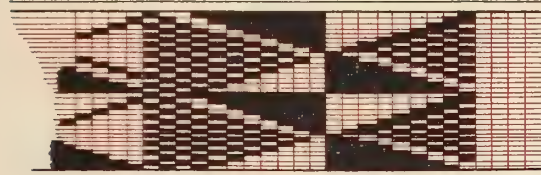
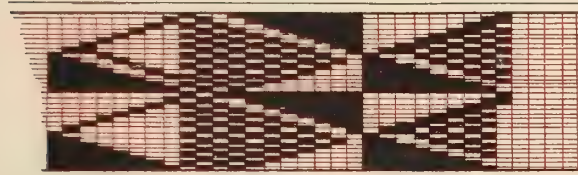




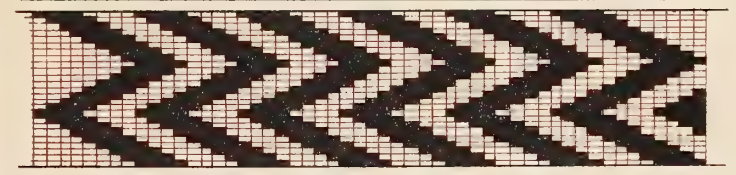
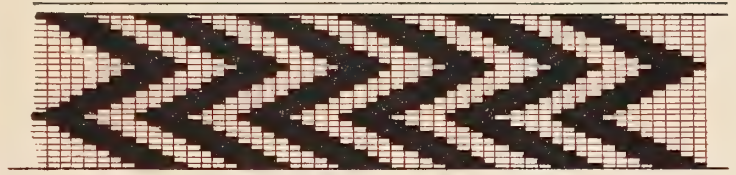
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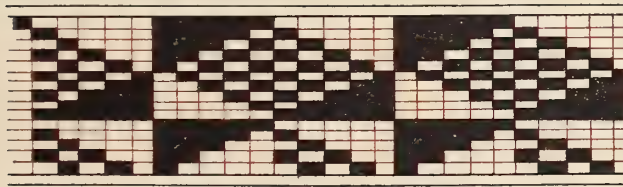
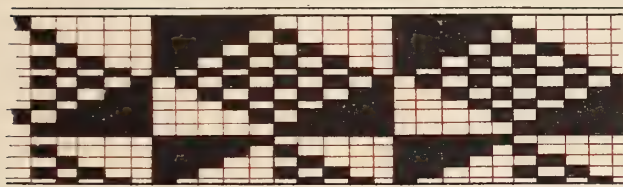
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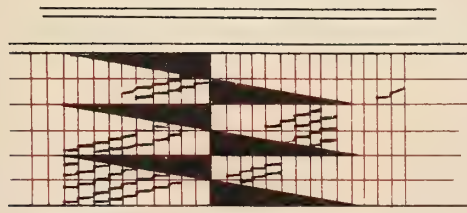
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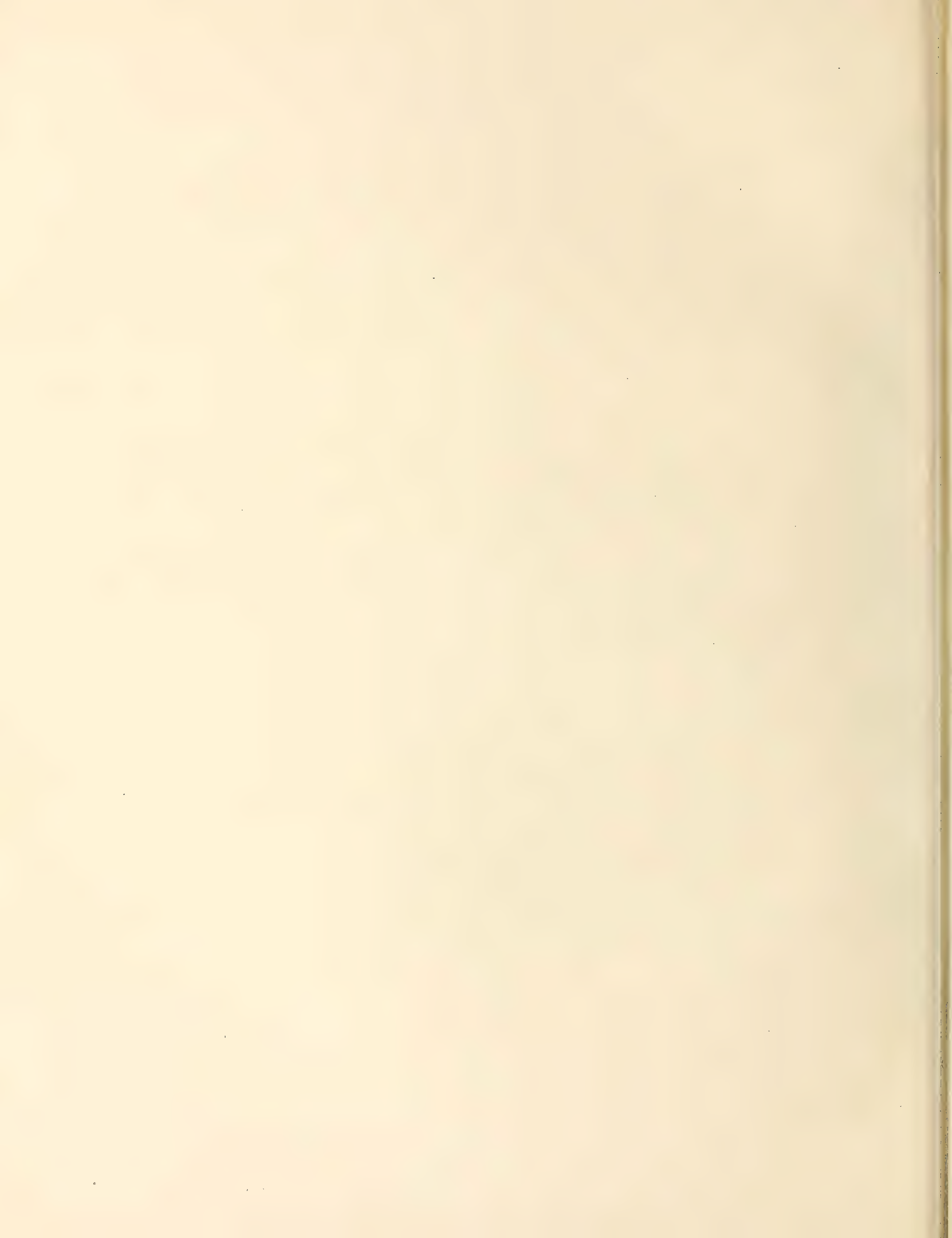
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7







1. OUTER PASSAGE, NORTH END.



2. SERDAB (?)

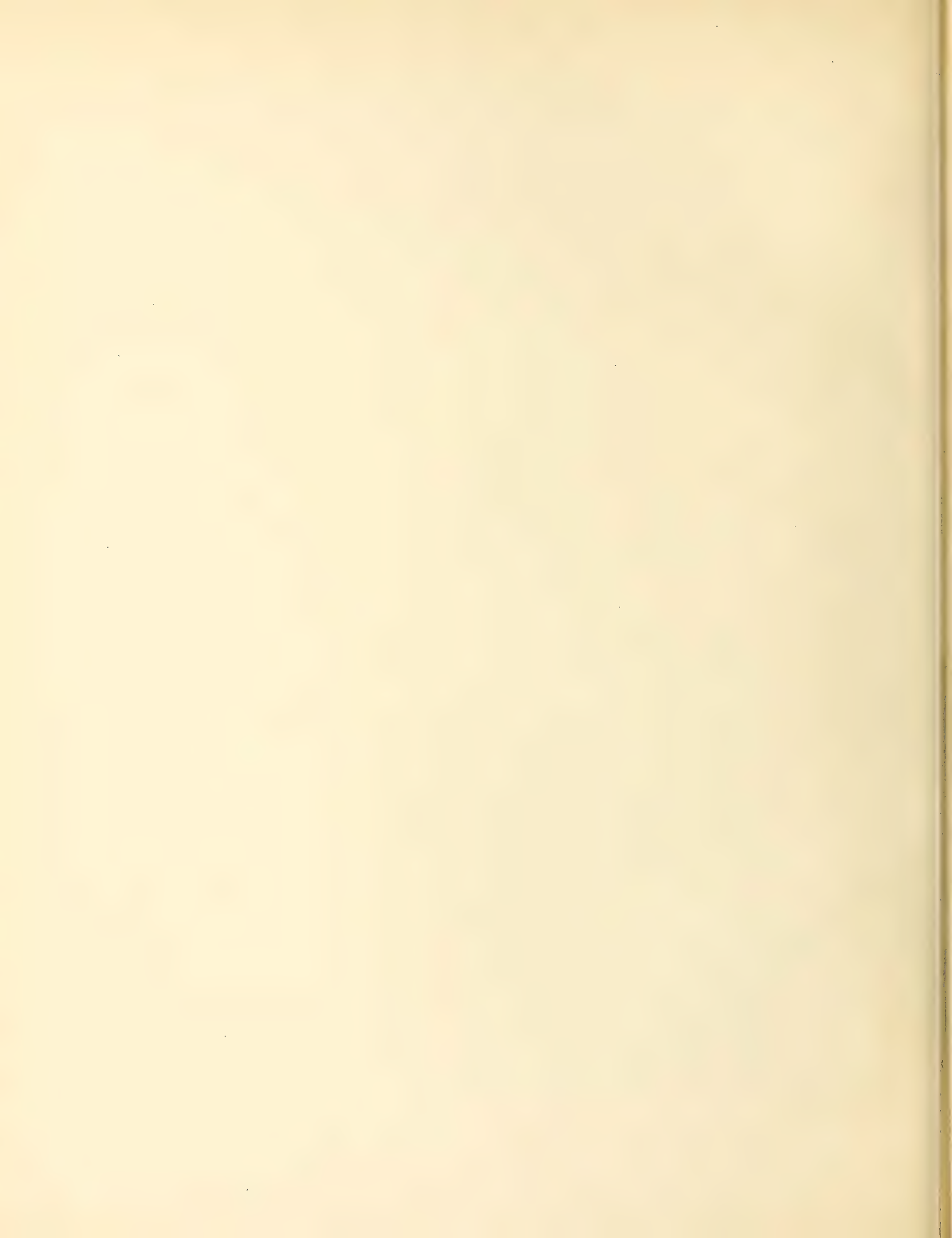


3. CONCEALED NICHES.



4. SHAFT FROM SOUTH.







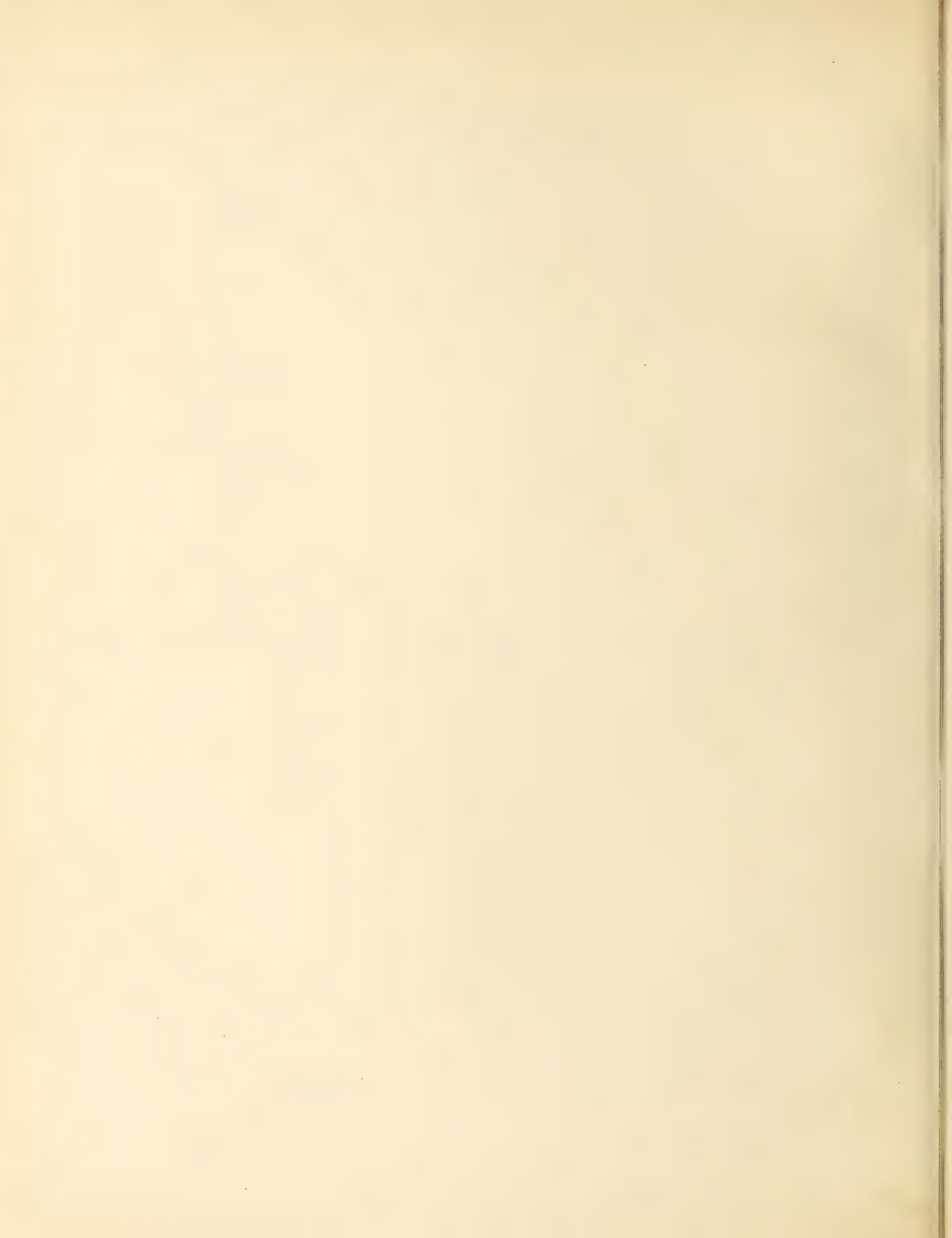
I. ENTRANCE CHAMBER UNDERGROUND.



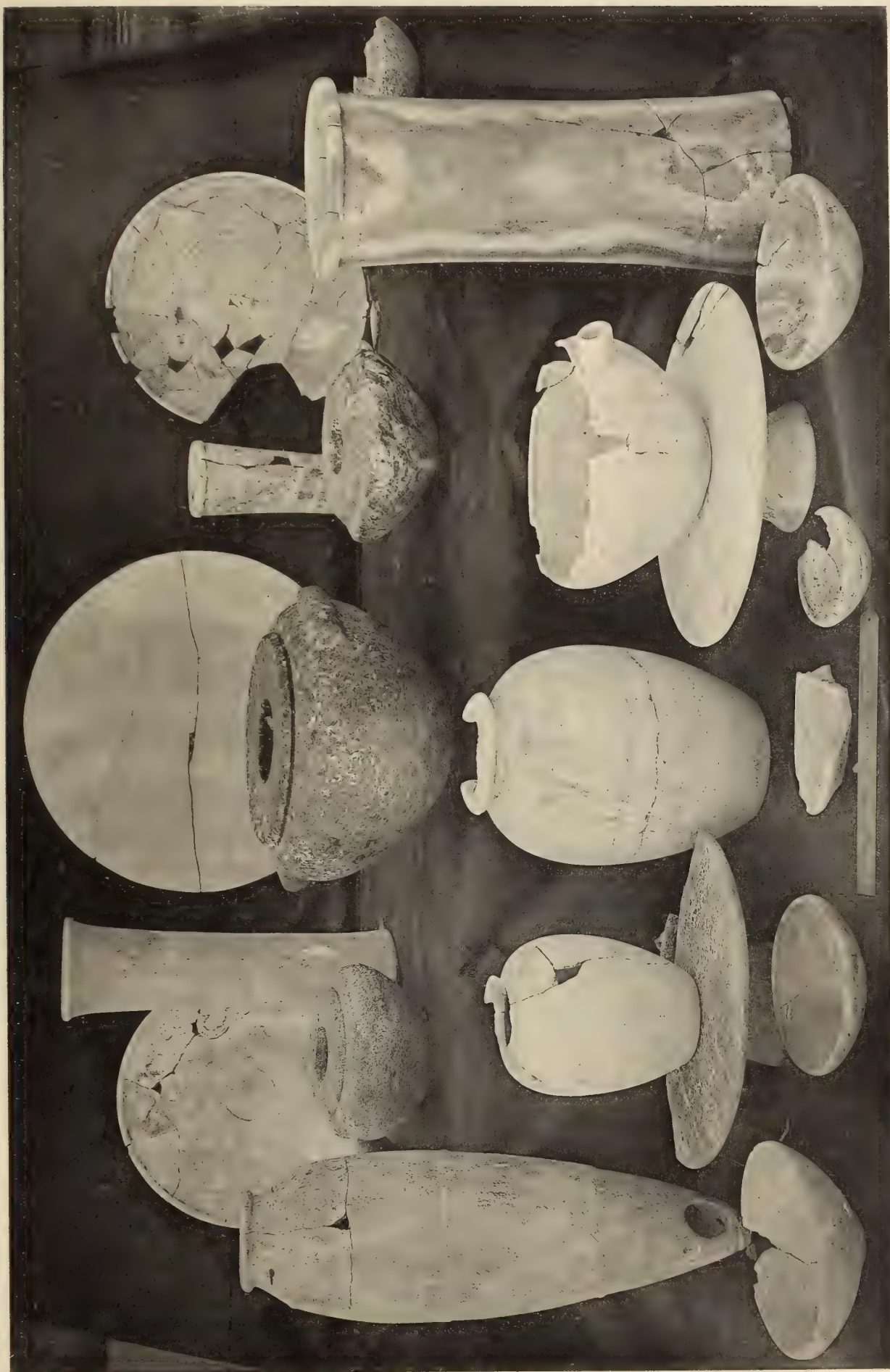
2. PASSAGE LEADING TO BURIAL CHAMBER.



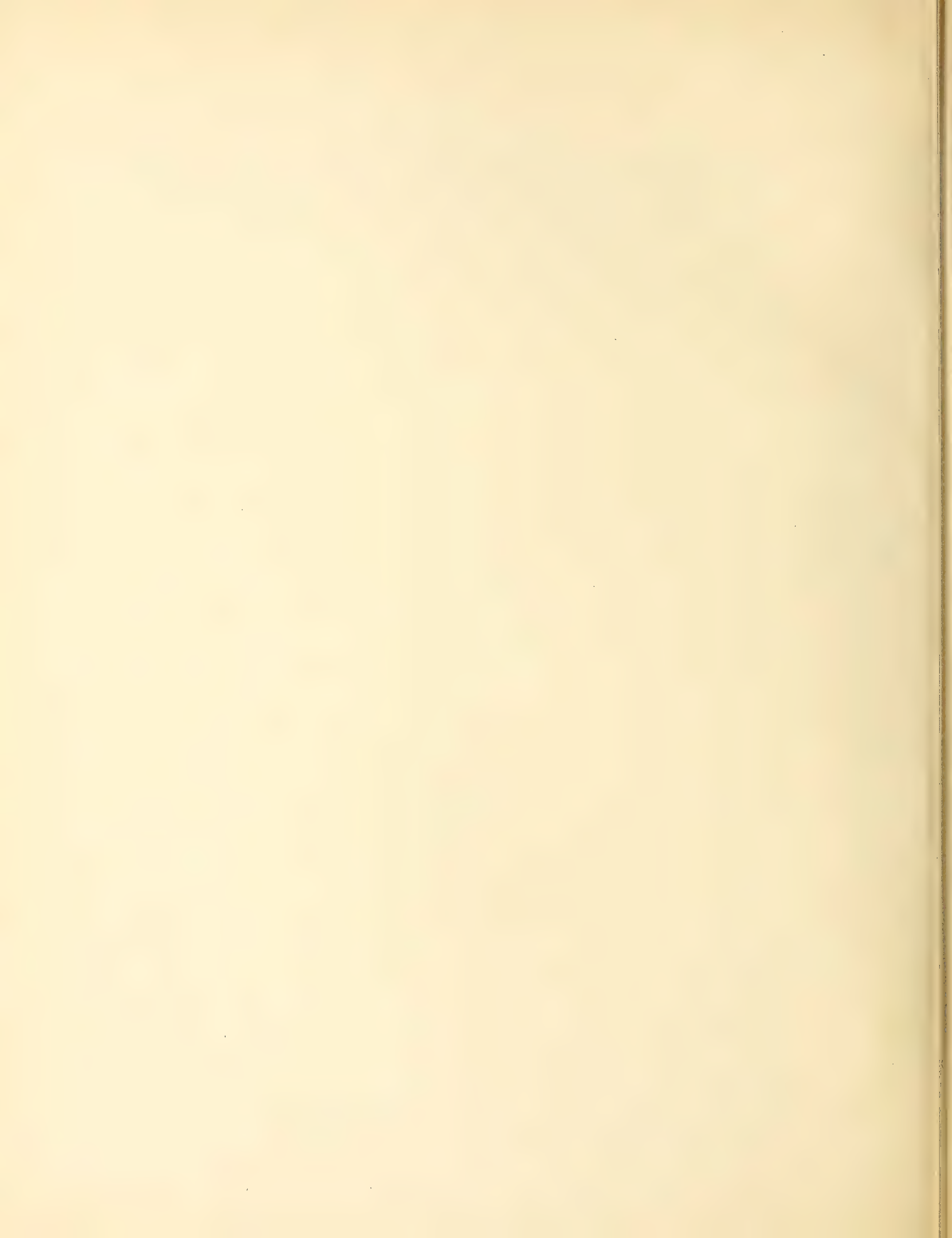
3. BURIAL CHAMBER.

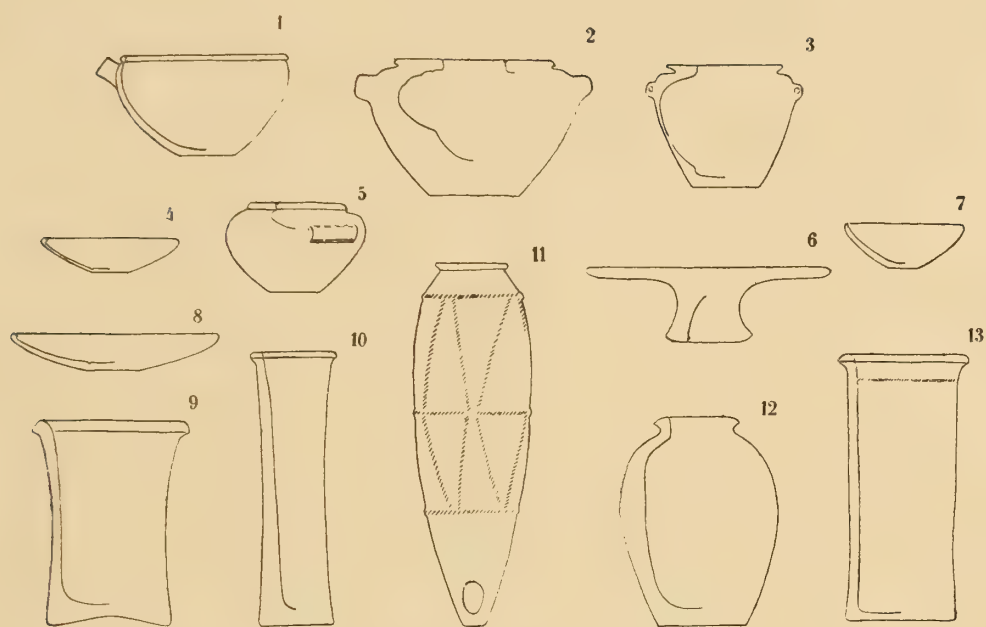




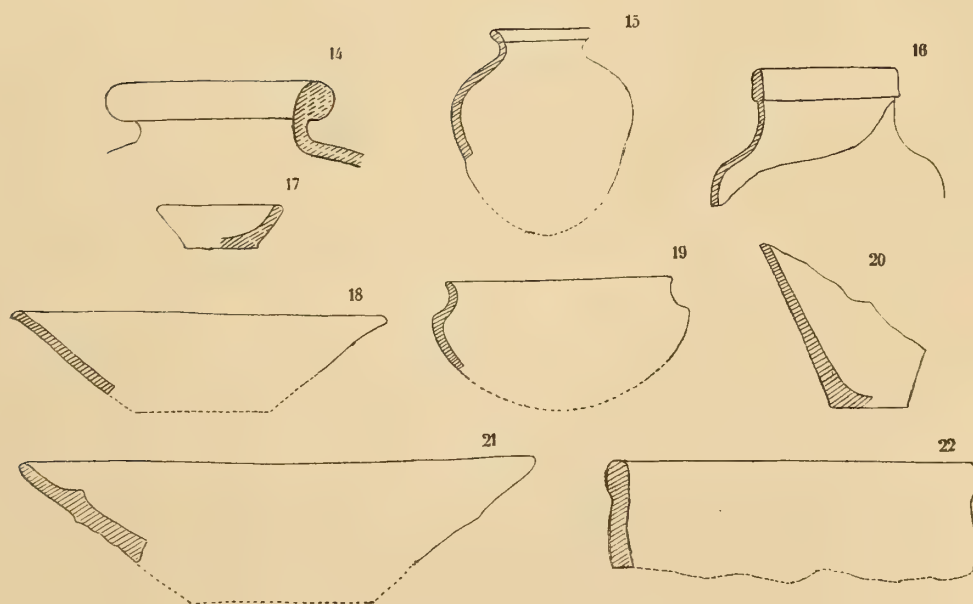


TYPES OF STONE VASES.



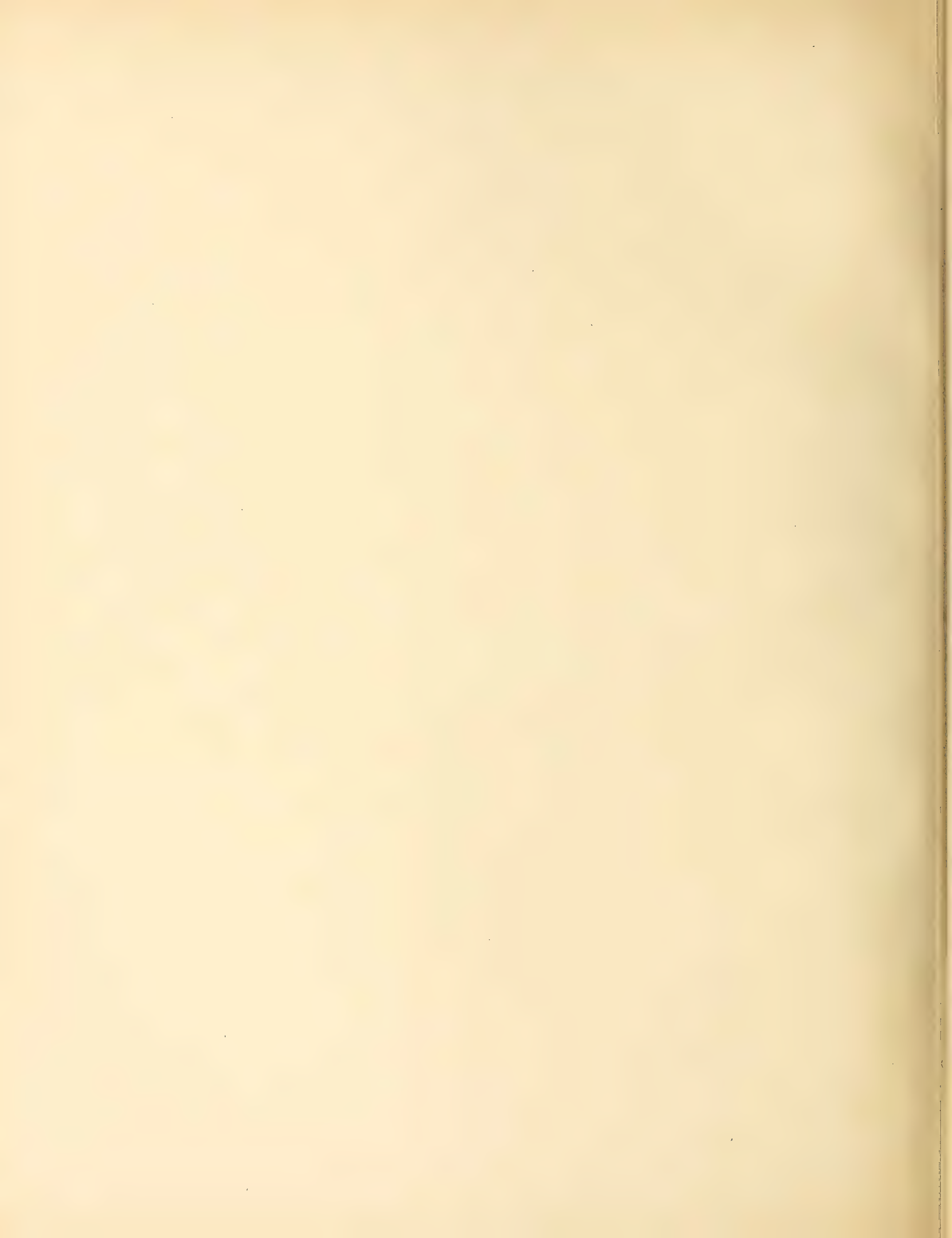


STONE VASES.



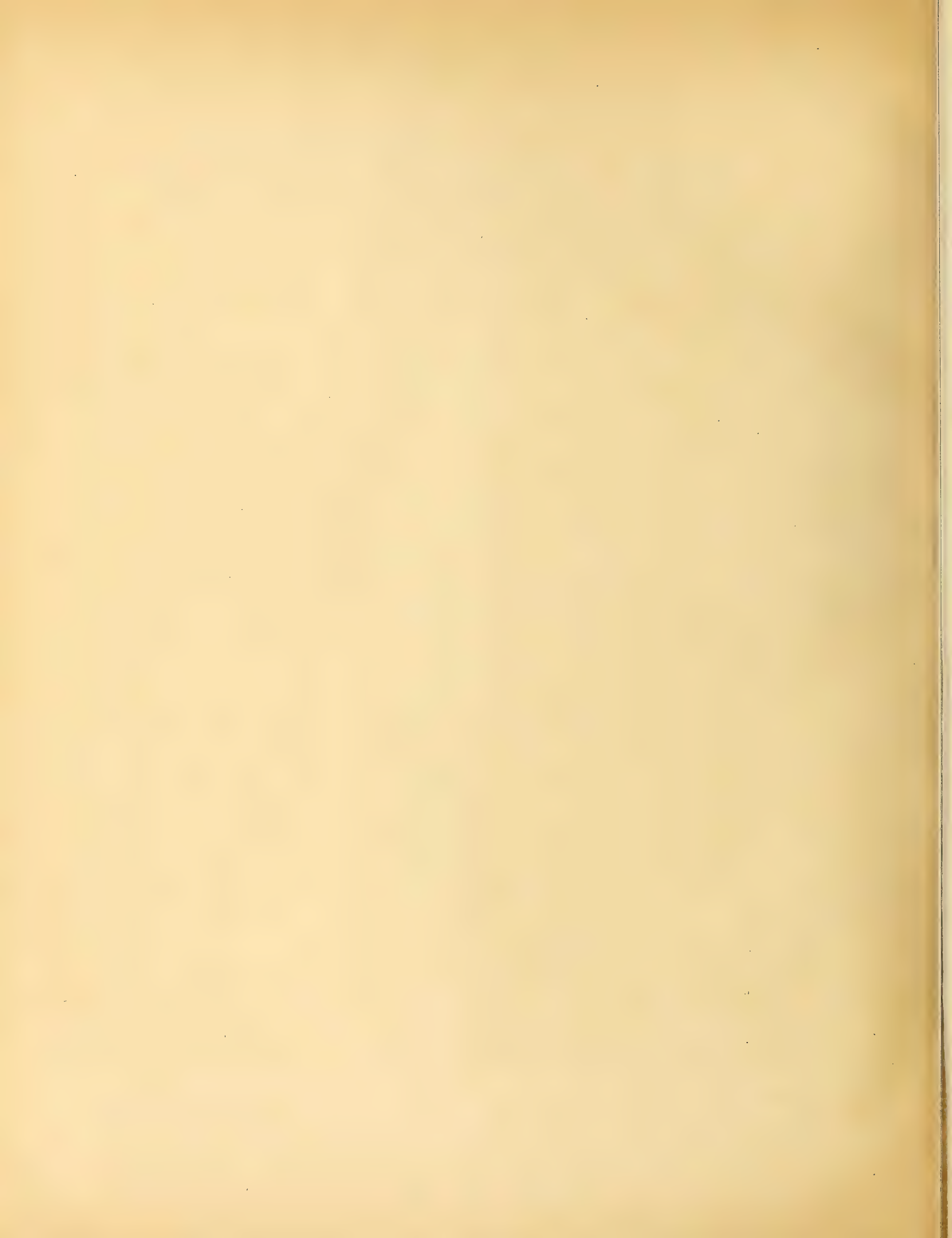
POTTERY.



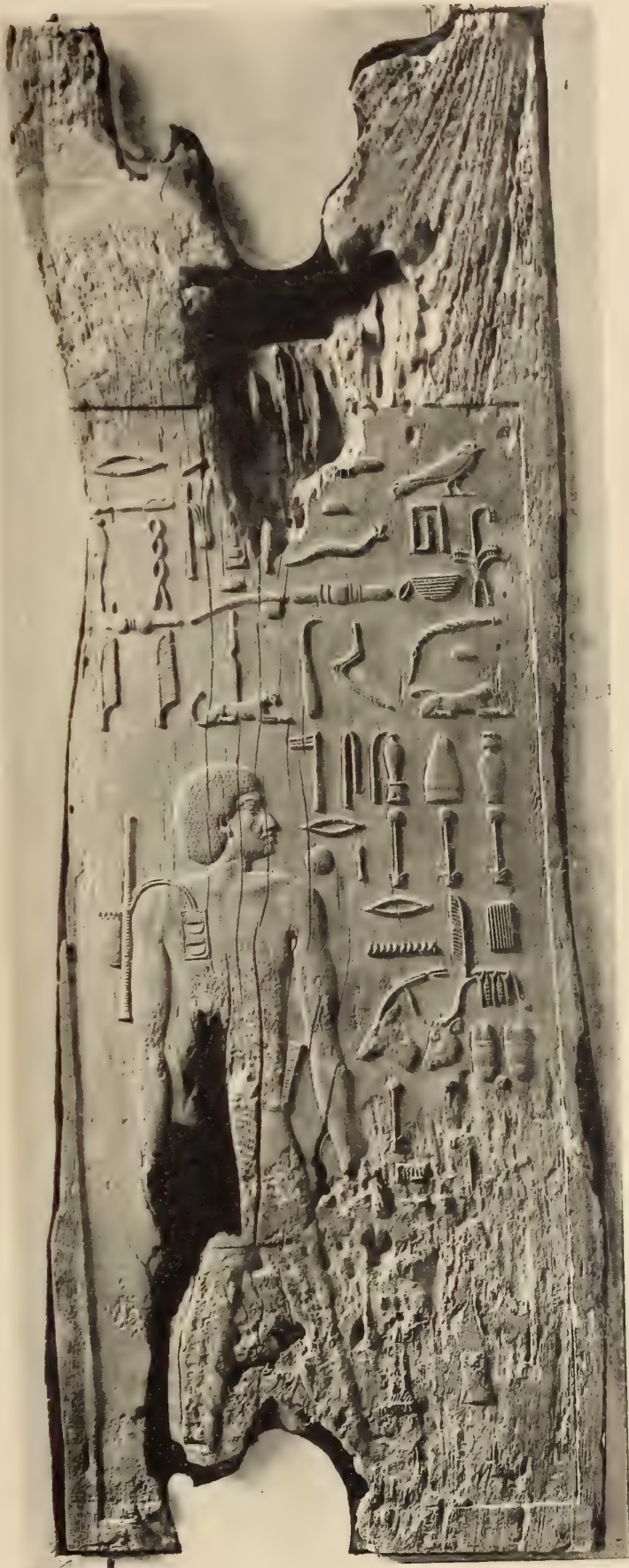




SMALL OBJECTS, CHIEFLY OF BONE, FLINTS, CLAY SEALING OF NETERKHET.



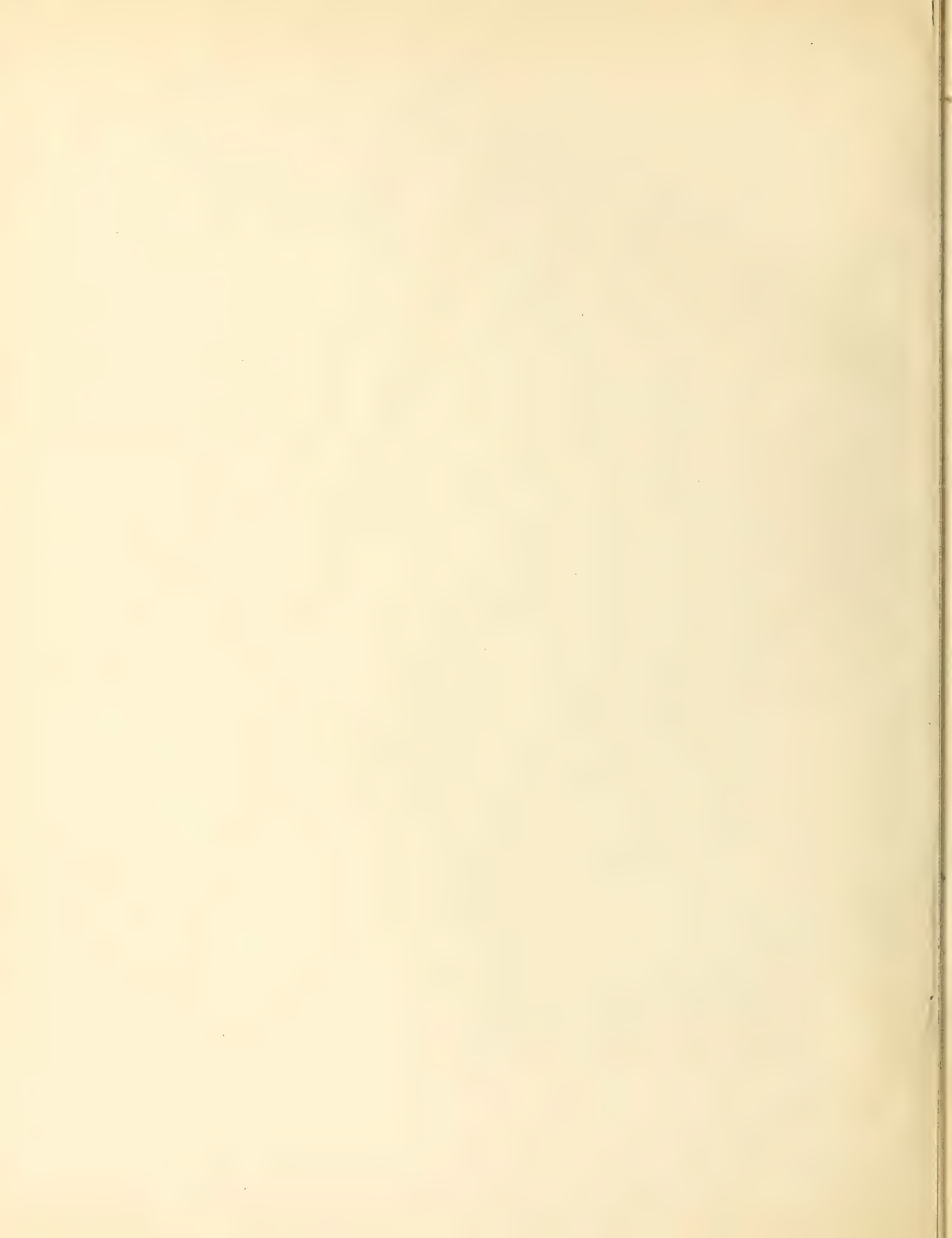




I



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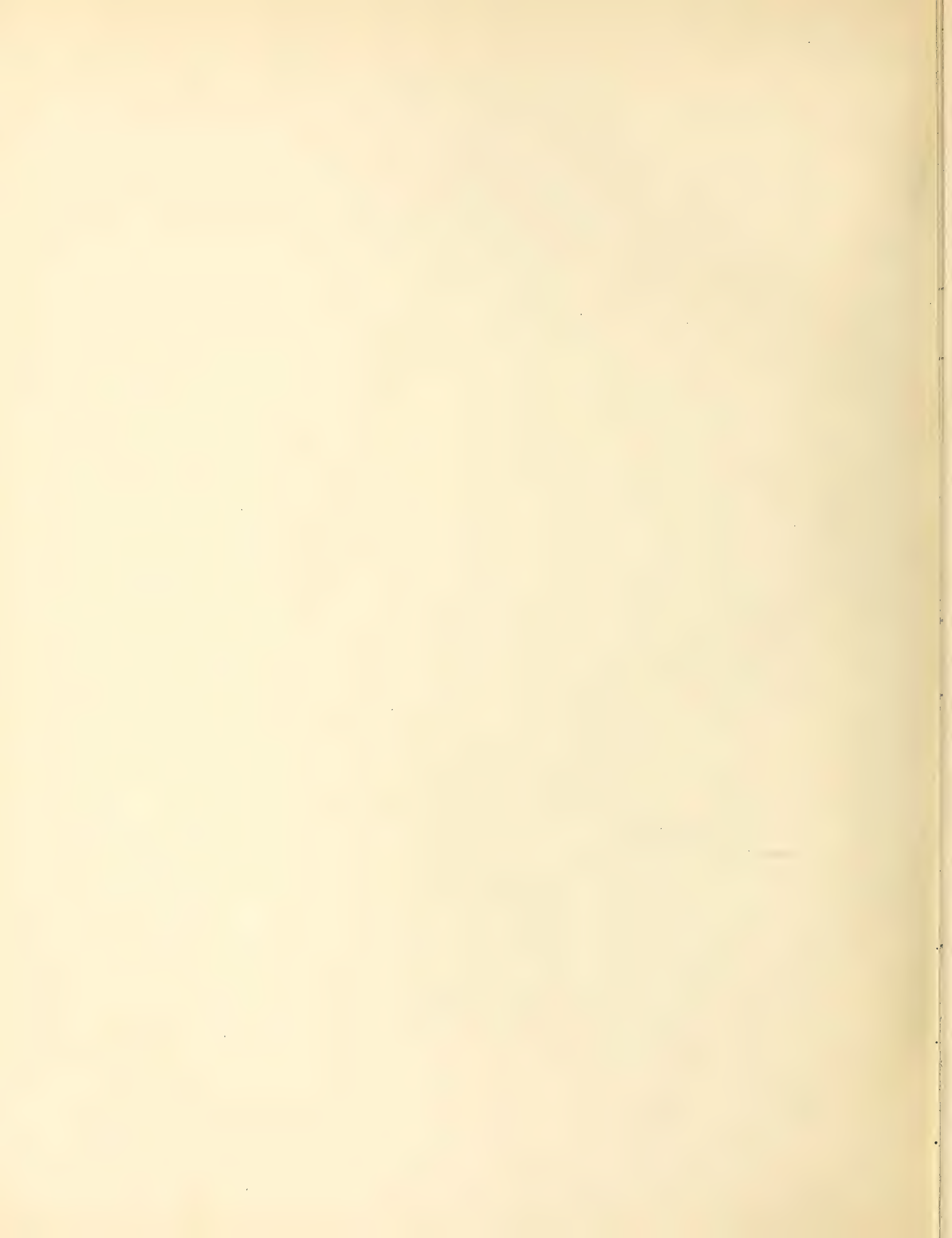


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4

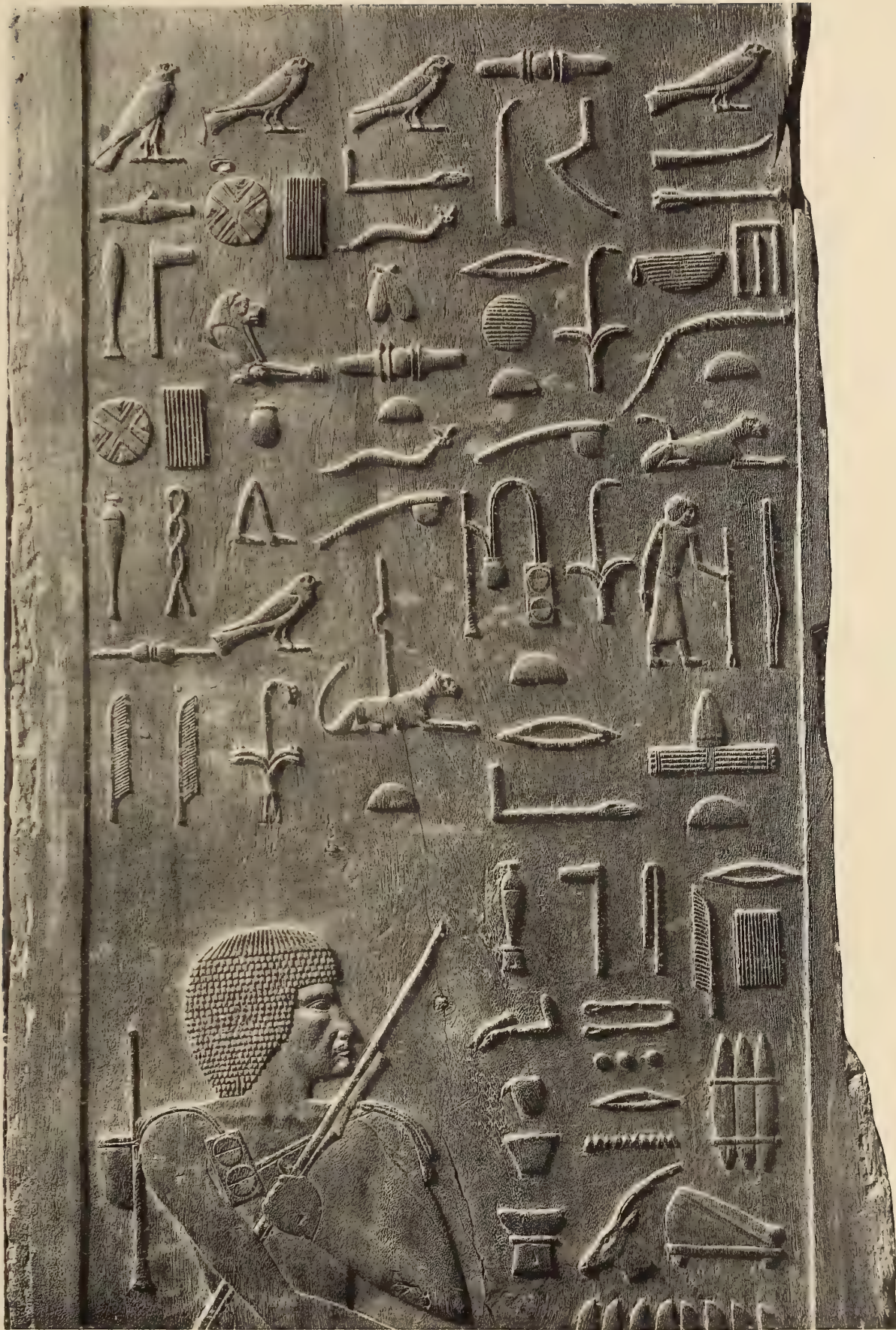


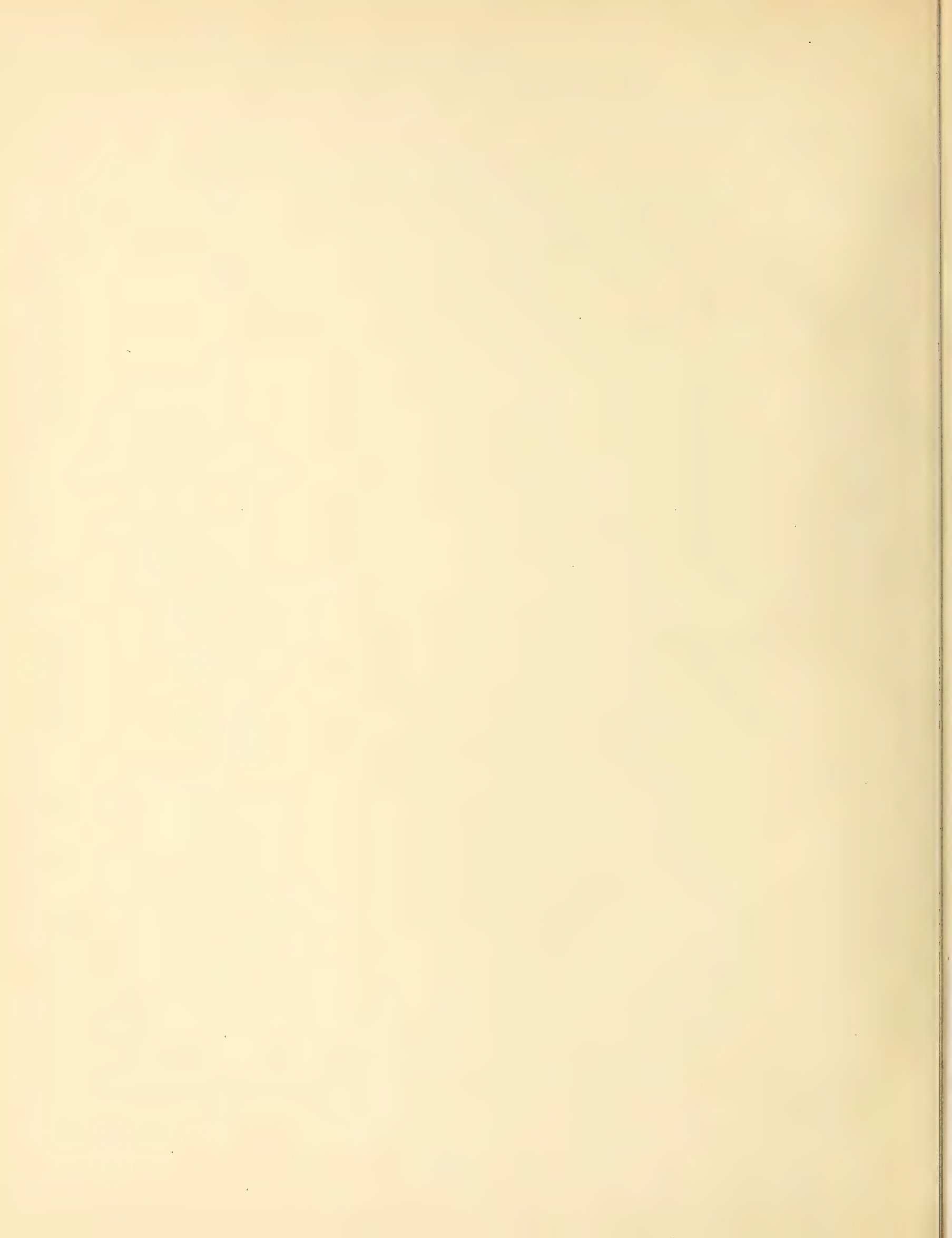








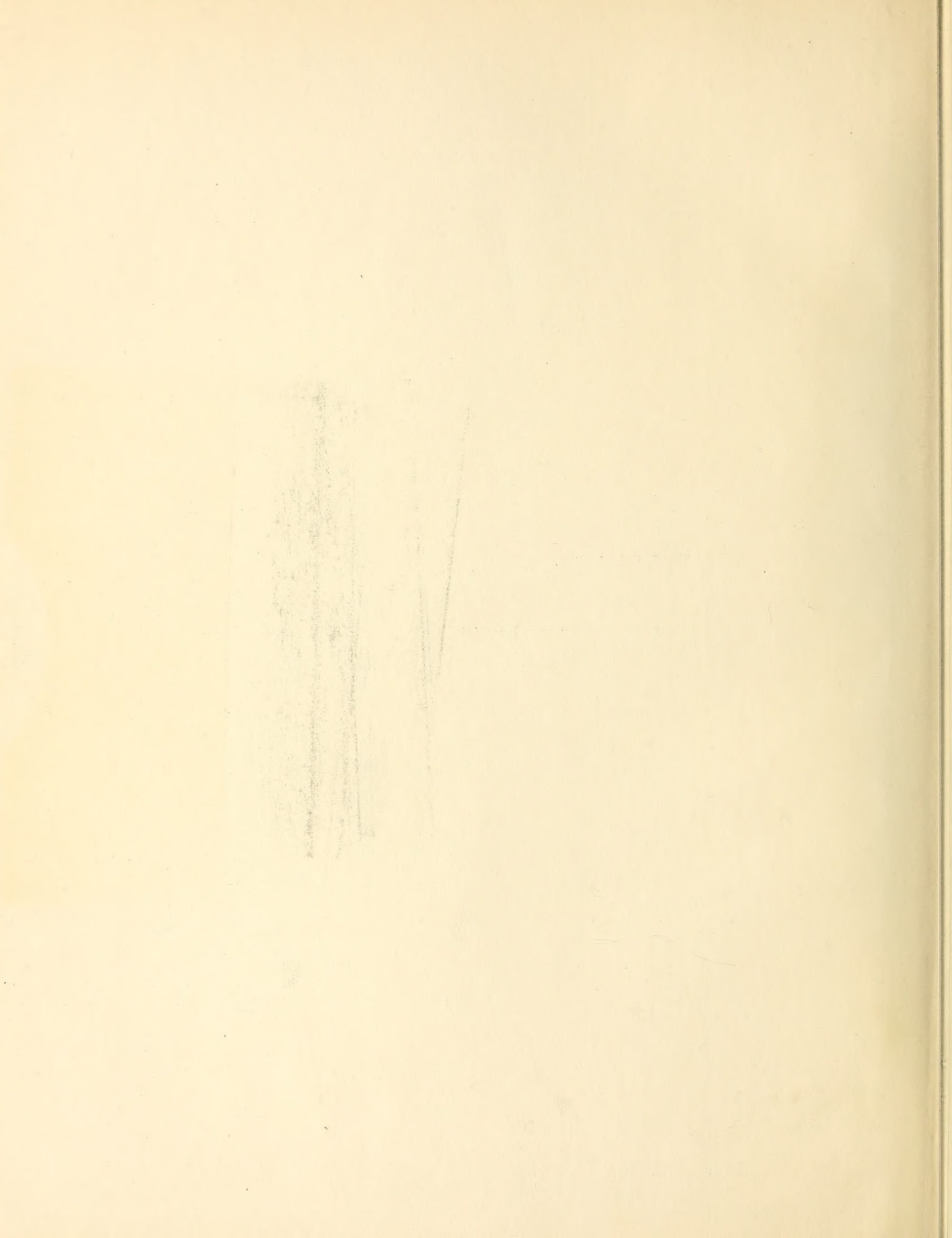












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